

> e hsu walter/au

E1	1	HSU W W R/AU
E2	202	HSU W Y/AU
E3	12 -->	HSU WALTER/AU
E4	146	HSU WALTER H/AU
E5	10	HSU WALTER W/AU
E6	1	HSU WAN C/AU
E7	1	HSU WAN CHI/AU
E8	7	HSU WAN CHIN/AU
E9	3	HSU WAN CHING/AU
E10	1	HSU WAN CHUAN/AU
E11	2	HSU WAN CHUN/AU
E12	1	HSU WAN FU/AU

=> s e3-e4 and mycoplasm?

L1 6 ("HSU WALTER"/AU OR "HSU WALTER H"/AU) AND MYCOPLASM?

=> dup rem l1

PROCESSING COMPLETED FOR L1

L2 4 DUP REM L1 (2 DUPLICATES REMOVED)

=> d bib ab 1-

YOU HAVE REQUESTED DATA FROM 4 ANSWERS - CONTINUE? Y/(N):y

L2 ANSWER 1 OF 4 USPATFULL on STN

AN 2005:330188 USPATFULL

TI **Mycoplasma** polypeptides

IN **Hsu, Walter H.**, 2725 Northridge Circle, Ames, IA, UNITED STATES 50014

Young, Theresa F., Carlsbad, CA, UNITED STATES

Ross, Richard F., Ames, IA, UNITED STATES

Zhou, En-Min, Ames, IA, UNITED STATES

PA Iowa State University Research Foundation, Inc., Ames, IA, UNITED STATES, 50011-2131 (U.S. corporation)

PI US 2005287163 A1 20051229

AI US 2003-509926 A1 20030404 (10)

WO 2003-US10305 20030404

20050729 PCT 371 date

PRAI US 2003-370344P 20020405 (60)

DT Utility

FS APPLICATION

LREP FISH & RICHARDSON P.C., PO BOX 1022, MINNEAPOLIS, MN, 55440-1022, US

CLMN Number of Claims: 33

ECL Exemplary Claim: 1

DRWN 15 Drawing Page(s)

LN.CNT 1268

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides methods and materials related to **mycoplasma**. For example, the invention provides **mycoplasma** polypeptides having the ability to increase calcium release from cells (e.g., porcine ciliated tracheal cells) as well as antibodies that bind to such **mycoplasma** polypeptides. In addition, the invention provides methods for identifying inhibitors of **mycoplasma**-induced calcium release from porcine ciliated tracheal cells.

L2 ANSWER 2 OF 4 MEDLINE on STN

AN 2005062454 MEDLINE

DN PubMed ID: 15690953

TI Comparison of two swine **Mycoplasma** hyopneumoniae enzyme-linked immunosorbent assays for detection of antibodies from vaccinated pigs and field serum samples.

AU Ameri-Mahabadi Mehrdad; Zhou En-Min; **Hsu Walter H**

CS Veterinary Diagnostic Laboratory, Department of Veterinary Diagnostic and Production Animal Medicine, College of Veterinary Medicine, Iowa State University, Ames, IA 50011, USA.

SO Journal of veterinary diagnostic investigation : official publication of the American Association of Veterinary Laboratory Diagnosticians, Inc, (2005 Jan) Vol. 17, No. 1, pp. 61-4.

Journal code: 9011490. ISSN: 1040-6387.

CY United States  
DT (EVALUATION STUDIES)  
Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 200502  
ED Entered STN: 20050205  
Last Updated on STN: 20050301  
Entered Medline: 20050225

AB **Mycoplasma hyopneumoniae** (Mhyo) causes **mycoplasmal** pneumonia, an economically important disease of swine. Serodiagnosis of Mhyo is based on the current available commercial enzyme immunoassays for detection of swine antibodies against Mhyo, which are the indirect enzyme-linked immunosorbent assay (ELISA) and the blocking ELISA (B-ELISA). Because of the limited information available for these ELISAs, these 2 assays were compared by testing 347 serum samples collected from vaccinated pigs at 0, 13, 28, 43, and 62 days postimmunization (DPI), 50 samples from nonvaccinated pigs, and 1,013 field serum samples. The results of comparison study showed that the specificity for both ELISAs was 99.2% generated from 139 non-vaccinated negative samples. The sensitivities for indirect ELISA generated from samples collected from animals that received the vaccine at DPI 13, 28, 43, and 62 were 0%, 95.7%, 88.4%, and 92.6%, respectively, whereas the sensitivities for B-ELISA were 0%, 98%, 100%, and 97%, respectively. The overall agreement of 96.7% and 80.3% was generated between 2 ELISAs from negative and vaccinated pigs and from field samples, respectively.

L2 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:836908 CAPLUS

DN 139:336910

TI **Mycoplasma hyopneumoniae** polypeptides inducing calcium release from ciliated tracheal cells

IN Hsu, Walter H.; Young, Theresa F.; Ross, Richard F.; Zhou, En-Min

PA Iowa State University Research Foundation, Inc., USA

SO PCT Int. Appl., 49 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003086473	A1	20031023	WO 2003-US10305	20030404
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2481042	AA	20031023	CA 2003-2481042	20030404
	AU 2003221791	A1	20031027	AU 2003-221791	20030404
	EP 1496945	A1	20050119	EP 2003-718191	20030404
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	CN 1658906	A	20050824	CN 2003-813128	20030404
	JP 2005535573	T2	20051124	JP 2003-583487	20030404
	US 2005287163	A1	20051229	US 2005-509926	20050729
PRAI	US 2002-370344P	P	20020405		
	WO 2003-US10305	W	20030404		

AB The authors disclose **mycoplasma** polypeptides having the ability to increase calcium release from cells (e.g., porcine ciliated tracheal cells) as well as antibodies that bind to such **mycoplasma** polypeptides. In addition, the invention provides methods for identifying inhibitors of **mycoplasma**-induced calcium release from porcine

ciliated tracheal cells.  
RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 4 OF 4 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
DUPLICATE 1  
AN 2002:296991 BIOSIS  
DN PREV200200296991  
TI **Mycoplasma** hyopneumoniae increases intracellular calcium release  
in porcine ciliated tracheal cells.  
AU Park, Seung-Chun; Yibchok-Anun, Sirintorn; Cheng, Henrique; Young, Theresa  
F.; Thacker, Eileen L.; Minion, F. Chris; Ross, Richard F.; Hsu,  
Walter H. [Reprint author]  
CS Department of Biomedical Sciences, Iowa State University, Ames, IA, 50011,  
USA  
whsu@iastate.edu  
SO Infection and Immunity, (May, 2002) Vol. 70, No. 5, pp. 2502-2506. print.  
CODEN: INFIBR. ISSN: 0019-9567.  
DT Article  
LA English  
ED Entered STN: 15 May 2002  
Last Updated on STN: 15 May 2002  
AB We investigated the effects of intact pathogenic **Mycoplasma**  
hyopneumoniae, nonpathogenic M. hyopneumoniae, and **Mycoplasma**  
flocculare on intracellular free Ca<sup>2+</sup> concentrations ((Ca<sup>2+</sup>)<sub>i</sub>) in porcine  
ciliated tracheal epithelial cells. The ciliated epithelial cells had  
basal (Ca<sup>2+</sup>)<sub>i</sub> of 103 +/- 3 nM (n = 217 cells). The (Ca<sup>2+</sup>)<sub>i</sub> increased by  
250 +/- 19 nM (n = 47 cells) from the basal level within 100 s of the  
addition of pathogenic M. hyopneumoniae strain 91-3 (300 mug/ml), and this  
increase lasted approx 60 s. In contrast, nonpathogenic M. hyopneumoniae  
and M. flocculare at concentrations of 300 mug/ml failed to increase  
(Ca<sup>2+</sup>)<sub>i</sub>. In Ca<sup>2+</sup>-free medium, pathogenic M. hyopneumoniae still increased  
(Ca<sup>2+</sup>)<sub>i</sub> in tracheal cells. Pretreatment with thapsigargin (1 muM for 30  
min), which depleted the Ca<sup>2+</sup> store in the endoplasmic reticulum,  
abolished the effect of M. hyopneumoniae. Pretreatment with pertussis  
toxin (100 ng/ml for 3 h) or U-73122 (2 muM for 100 s), an inhibitor of  
phospholipase C, also abolished the effect of M. hyopneumoniae. The  
administration of mastoparan 7, an activator of pertussis toxin-sensitive  
proteins Gi and Go, increased (Ca<sup>2+</sup>)<sub>i</sub> in ciliated tracheal cells. These  
results suggest that pathogenic M. hyopneumoniae activates receptors that  
are coupled to Gi or Go, which in turn activates a phospholipase C  
pathway, thereby releasing Ca<sup>2+</sup> from the endoplasmic reticulum. Thus, an  
increase in Ca<sup>2+</sup> may serve as a signal for the pathogenesis of M.  
hyopneumoniae.

=> e young theresa f/au

E1	13	YOUNG THERESA A/AU
E2	11	YOUNG THERESA B/AU
E3	21	--> YOUNG THERESA F/AU
E4	1	YOUNG THERESA H/AU
E5	1	YOUNG THERESA M/AU
E6	1	YOUNG THERESA S/AU
E7	37	YOUNG THOMAS/AU
E8	17	YOUNG THOMAS A/AU
E9	4	YOUNG THOMAS B/AU
E10	3	YOUNG THOMAS B III/AU
E11	3	YOUNG THOMAS BENTON/AU
E12	1	YOUNG THOMAS BENTON III/AU

=> s e3

L3 21 "YOUNG THERESA F"/AU

=> dup rem l3

PROCESSING COMPLETED FOR L3

L4 15 DUP REM L3 (6 DUPLICATES REMOVED)

=> d bib ab 1-

YOU HAVE REQUESTED DATA FROM 15 ANSWERS - CONTINUE? Y/(N):y

L4 ANSWER 1 OF 15 USPATFULL on STN  
 AN 2005:330188 USPATFULL  
 TI Mycoplasma polypeptides  
 IN Hsu, Walter H., 2725 Northridge Circle, Ames, IA, UNITED STATES 50014  
 Young, Theresa F., Carlsbad, CA, UNITED STATES  
 Ross, Richard F., Ames, IA, UNITED STATES  
 Zhou, En-Min, Ames, IA, UNITED STATES  
 PA Iowa State University Research Foundation, Inc., Ames, IA, UNITED STATES, 50011-2131 (U.S. corporation)  
 PI US 2005287163 A1 20051229  
 AI US 2003-509926 A1 20030404 (10)  
 WO 2003-US10305 20030404  
 20050729 PCT 371 date  
 PRAI US 2003-370344P 20020405 (60)  
 DT Utility  
 FS APPLICATION  
 LREP FISH & RICHARDSON P.C., PO BOX 1022, MINNEAPOLIS, MN, 55440-1022, US  
 CLMN Number of Claims: 33  
 ECL Exemplary Claim: 1  
 DRWN 15 Drawing Page(s)  
 LN.CNT 1268

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides methods and materials related to mycoplasma. For example, the invention provides mycoplasma polypeptides having the ability to increase calcium release from cells (e.g., porcine ciliated tracheal cells) as well as antibodies that bind to such mycoplasma polypeptides. In addition, the invention provides methods for identifying inhibitors of mycoplasma-induced calcium release from porcine ciliated tracheal cells.

L4 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN  
 AN 2003:836908 CAPLUS  
 DN 139:336910  
 TI Mycoplasma hyopneumoniae polypeptides inducing calcium release from ciliated tracheal cells  
 IN Hsu, Walter H.; Young, Theresa F.; Ross, Richard F.; Zhou, En-Min  
 PA Iowa State University Research Foundation, Inc., USA  
 SO PCT Int. Appl., 49 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003086473	A1	20031023	WO 2003-US10305	20030404
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2481042	AA	20031023	CA 2003-2481042	20030404
AU 2003221791	A1	20031027	AU 2003-221791	20030404
EP 1496945	A1	20050119	EP 2003-718191	20030404
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1658906	A	20050824	CN 2003-813128	20030404
JP 2005535573	T2	20051124	JP 2003-583487	20030404
US 2005287163	A1	20051229	US 2005-509926	20050729
PRAI US 2002-370344P	P	20020405		
WO 2003-US10305	W	20030404		

AB The authors disclose mycoplasma polypeptides having the ability to increase calcium release from cells (e.g., porcine ciliated tracheal



cells) as well as antibodies that bind to such mycoplasma polypeptides.  
In addition, the invention provides methods for identifying inhibitors of mycoplasma-induced calcium release from porcine ciliated tracheal cells.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 15 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
DUPLICATE 1  
AN 2002:296991 BIOSIS  
DN PREV200200296991  
TI Mycoplasma hyopneumoniae increases intracellular calcium release in  
porcine ciliated tracheal cells.  
AU Park, Seung-Chun; Yibchok-Anun, Sirintorn; Cheng, Henrique; **Young, Theresa F.**; Thacker, Eileen L.; Minion, F. Chris; Ross, Richard F.;  
Hsu, Walter H. [Reprint author]  
CS Department of Biomedical Sciences, Iowa State University, Ames, IA, 50011,  
USA  
whsu@iastate.edu  
SO Infection and Immunity, (May, 2002) Vol. 70, No. 5, pp. 2502-2506. print.  
CODEN: INFIBR. ISSN: 0019-9567.  
DT Article  
LA English  
ED Entered STN: 15 May 2002  
Last Updated on STN: 15 May 2002  
AB We investigated the effects of intact pathogenic Mycoplasma hyopneumoniae,  
nonpathogenic M. hyopneumoniae, and Mycoplasma flocculare on intracellular  
free Ca<sup>2+</sup> concentrations ((Ca<sup>2+</sup>)<sub>i</sub>) in porcine ciliated tracheal epithelial  
cells. The ciliated epithelial cells had basal (Ca<sup>2+</sup>)<sub>i</sub> of 103 ± 3 nM (n  
= 217 cells). The (Ca<sup>2+</sup>)<sub>i</sub> increased by 250 ± 19 nM (n = 47 cells) from  
the basal level within 100 s of the addition of pathogenic M.  
hyopneumoniae strain 91-3 (300 mug/ml), and this increase lasted approx 60  
s. In contrast, nonpathogenic M. hyopneumoniae and M. flocculare at  
concentrations of 300 mug/ml failed to increase (Ca<sup>2+</sup>)<sub>i</sub>. In Ca<sup>2+</sup>-free  
medium, pathogenic M. hyopneumoniae still increased (Ca<sup>2+</sup>)<sub>i</sub> in tracheal  
cells. Pretreatment with thapsigargin (1 μM for 30 min), which depleted  
the Ca<sup>2+</sup> store in the endoplasmic reticulum, abolished the effect of M.  
hyopneumoniae. Pretreatment with pertussis toxin (100 ng/ml for 3 h) or  
U-73122 (2 μM for 100 s), an inhibitor of phospholipase C, also abolished  
the effect of M. hyopneumoniae. The administration of mastoparan 7, an  
activator of pertussis toxin-sensitive proteins Gi and Go, increased  
(Ca<sup>2+</sup>)<sub>i</sub> in ciliated tracheal cells. These results suggest that pathogenic  
M. hyopneumoniae activates receptors that are coupled to Gi or Go, which  
in turn activates a phospholipase C pathway, thereby releasing Ca<sup>2+</sup> from  
the endoplasmic reticulum. Thus, an increase in Ca<sup>2+</sup> may serve as a  
signal for the pathogenesis of M. hyopneumoniae.

L4 ANSWER 4 OF 15 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
AN 2001:303098 BIOSIS  
DN PREV200100303098  
TI Differential production of proinflammatory cytokines: In vitro PRRSV and  
Mycoplasma hyopneumoniae co-infection model.  
AU Thanawongnuwech, Roongroje; **Young, Theresa F.**; Thacker, Brad J.;  
Thacker, Eileen L. [Reprint author]  
CS Veterinary Medical Research Institute, Iowa State University, Ames, IA,  
50010, USA  
ethacker@iastate.edu  
SO Veterinary Immunology and Immunopathology, (10 May, 2001) Vol. 79, No.  
1-2, pp. 115-127. print.  
CODEN: VIIMDS. ISSN: 0165-2427.  
DT Article  
LA English  
ED Entered STN: 27 Jun 2001  
Last Updated on STN: 19 Feb 2002  
AB An in vitro culture system was developed to investigate the induction of  
proinflammatory cytokines by Mycoplasma hyopneumoniae and porcine  
reproductive and respiratory syndrome virus (PRRSV). M. hyopneumoniae  
infected porcine tracheal ring explants were co-cultured with PRRSV  
infected pulmonary alveolar macrophages (PAMs) for 24 h to assess the  
cytokine production of each pathogen alone and the interaction between the

two pathogens in vitro. Semiquantitative RT-PCR was used to measure interleukin (IL) 1alpha, IL1beta, IL6, IL8, IL10, IL12 and tumor necrosis factor (TNF) alpha mRNA in PAMs. Commercial ELISAs were used to measure soluble IL1beta, IL8, IL10 and TNF in the culture supernatant. In the dual infected group, mRNA expression of IL1alpha, IL1beta, IL8 and TNF was increased. Both the *M. hyopneumoniae*- and PRRSV-infected only groups tended to have increased expression of IL1alpha, IL1beta and IL8 mRNA, although no statistical difference was observed. Increased levels of IL1beta, IL8 and IL10 were present in the supernatant of the dual infected group as measured by ELISA. No increase in soluble TNF was observed in any of the groups. IL8 levels appeared high in all groups independent of infection status. The cause of the elevated IL8 was unknown, however, it may have been a non-specific response by the cells to tissue damage during the harvesting of the tracheal rings. Correlation between mRNA expression and the soluble cytokine levels were similar in the dual infected groups with the exception of IL10 and TNF. Levels of mRNA and soluble protein levels in the single pathogen infected groups were not as consistent. The increased production of proinflammatory cytokines IL1alpha, IL1beta, IL8 and TNF in the group infected with both *M. hyopneumoniae* and PRRSV suggests that cytokine induced inflammation may play an important role in the severe, chronic pneumonia induced by the concurrent infection of the two pathogens.

L4 ANSWER 5 OF 15 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
AN 2000:93068 BIOSIS  
DN PREV200000093068  
TI Effect of vaccination on the potentiation of porcine reproductive and  
respiratory syndrome virus (PRRSV)-induced pneumonia by *Mycoplasma*  
*hyopneumoniae*.  
AU Thacker, Eileen L. [Reprint author]; Thacker, Brad J.; Young, Theresa  
F.; Halbur, Patrick G.  
CS Veterinary Medical Research Institute, Iowa State University, 1802 Elwood  
Drive, Ames, IA, 50011, USA  
SO Vaccine, (Jan., 2000) Vol. 18, No. 13, pp. 1244-1252. print.  
CODEN: VACCDE. ISSN: 0264-410X.  
DT Article  
LA English  
ED Entered STN: 10 Mar 2000  
Last Updated on STN: 3 Jan 2002  
AB Porcine reproductive and respiratory syndrome virus (PRRSV) and *Mycoplasma*  
*hyopneumoniae* are frequently isolated pathogens from pigs with respiratory  
disease. A previous study conducted in our laboratory found that  
infection with *M. hyopneumoniae* increased the duration and severity of  
respiratory disease induced by PRRSV. The purpose of this experiment was  
to determine whether vaccination against *M. hyopneumoniae* and/or PRRSV  
decreased the enhancement of PRRSV-induced pneumonia. Both *M.*  
*hyopneumoniae* bacterin and PRRSV vaccine decreased the severity of  
clinical respiratory disease. Infection or vaccination with PRRSV  
appeared to decrease the efficacy of the *M. hyopneumoniae* bacterin.  
Vaccination with *M. hyopneumoniae* bacterin decreased the potentiation of  
PRRSV-induced pneumonia observed in the dual infected pigs. However,  
PRRSV vaccination in combination with *M. hyopneumoniae* bacterin eliminated  
this benefit and the amount of pneumonia induced by PRRSV increased.  
PRRSV vaccine alone did not decrease the potentiation of PRRSV pneumonia  
by *M. hyopneumoniae*.

L4 ANSWER 6 OF 15 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
AN 2000:159739 BIOSIS  
DN PREV200000159739  
TI A tissue culture system to study respiratory ciliary epithelial adherence  
of selected swine mycoplasmas.  
AU Young, Theresa F.; Thacker, Eileen L. [Reprint author];  
Erickson, Barbara Z.; Ross, Richard F.  
CS College of Veterinary Medicine, Veterinary Medical Research Institute,  
Iowa State University, 1802 Elwood Drive, Ames, IA, 50011, USA  
SO Veterinary Microbiology, (Feb., 2000) Vol. 71, No. 3-4, pp. 269-279.  
print.  
CODEN: VMICDQ. ISSN: 0378-1135.  
DT Article

LA English  
ED Entered STN: 26 Apr 2000  
Last Updated on STN: 4 Jan 2002  
AB An in vitro culture system for swine tracheal epithelial cells was developed to study the adherence of swine mycoplasmas. Swine tracheal epithelial cells were isolated by enzymatic digestion and cultured on microporous membranes. Growth medium was placed under the membrane support to create air-liquid interface feeding resulting in the cells growing cilia and microvilli on the apical surface. Two strains of Mycoplasma hyopneumoniae (pathogenic strain 91-3 and non-pathogenic type strain J) and two strains of Mycoplasma flocculare (type strain Ms42 and field isolate 7160T) were used in this study. The morphology of the cultured tracheal cells was evaluated by transmission electron microscopy. Adherence of M. hyopneumoniae and M. flocculare and damage to the cilia were demonstrated using scanning electron microscopy. The pathogenic M. hyopneumoniae strain 91-3 adhered to cilia inducing obvious damage. The non-pathogenic M. hyopneumoniae strain J did not adhere to mature cilia. Both M. flocculare strains Ms42 and 7160T adhered to mature and budding cilia. No obvious ciliary damage was observed with strain Ms42. Minimal damage consisting of a slight tangling of the cilia occurred after adherence by strain 7160T. This model will enable us to further study the role of adherence of mycoplasmas on the pathogenesis of swine pneumonia.

L4 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 1995:586552 CAPLUS  
DN 123:5153  
TI Characterization of Mycoplasma hyopneumoniae adhesins  
IN Ross, Richard F.; Young, Theresa F.; Zhang, Qijing  
PA Iowa State University Research Foundation, Inc., USA  
SO PCT Int. Appl., 84 pp.  
CODEN: PIXXD2

DT Patent  
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9509870	A1	19950413	WO 1994-US11320	19941005
	W: CN, CZ, NO, PL				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
PRAI	US 1993-132798	A	19931007		
	US 1994-274897	A	19940714		

AB The present invention provides for the identification, purification and characterization of M. hyopneumoniae adhesins and their use in vaccines and diagnostic testing. The M. hyopneumoniae adhesins of the invention were purified by an affinity chromatog. procedure which incorporates a novel M. hyopneumoniae receptor analog for the attachment and/or removal of the adhesins from a mycoplasmal preparation. In another aspect of the invention, there is provided an in vitro microtiter plate adherence assay for the characterization of M. hyopneumoniae and adhesins thereof. In addition, the effect of passage level on adherence of M. hyopneumoniae was evaluated; the selection of high-adherent and low-adherent clones conducted; and monoclonal antibodies against the adhesins were raised and used to study adherence inhibition.

L4 ANSWER 8 OF 15 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
DUPLICATE 2  
AN 1995:207638 BIOSIS  
DN PREV199598221938  
TI Identification and characterization of a Mycoplasma hyopneumoniae adhesin.  
AU Zhang, Qijing; Young, Theresa F.; Ross, R. F. [Reprint author]  
CS Vet. Med. Res. Inst., Iowa State Univ., 1802 Elwood Drive, Ames, IA 50011, USA  
SO Infection and Immunity, (1995) Vol. 63, No. 3, pp. 1013-1019.  
CODEN: INFIBR. ISSN: 0019-9567.

DT Article  
LA English

ED Entered STN: 23 May 1995  
Last Updated on STN: 23 May 1995

AB An adhesin of Mycoplasma hyopneumoniae was identified and characterized in

this study. A monoclonal antibody (MAB), F2G5, and its F(ab')<sub>2</sub> fragments inhibited the adherence of *M. hyopneumoniae* to porcine tracheal cilia, the natural targets to which the mycoplasma binds during infection. MAB F2G5 detected multiple bands, but predominantly recognized a 97-kDa (P97) protein of *M. hyopneumoniae* on immunoblots. Affinity chromatography, conducted with immobilized MAB F2G5, mainly purified P97. The purified proteins were able to bind to cilia and blocked the adherence of intact *M. hyopneumoniae* cells to cilia. Immunolabeling of mycoplasmas with MAB F2G5 under electron microscopy demonstrated that the proteins recognized by MAB F2G5 were located at the surface of the mycoplasma, predominantly on a surface fuzzy layer. These results indicate that P97 functions as an adhesin of *M. hyopneumoniae*. The N-terminal amino acid sequence of P97 did not have significant homology with any known bacterial or mycoplasmal adhesins, suggesting that P97 is a novel protein. The predominant proteins detected by MAB F2G5 in different strains varied in size, indicating that the antigen bearing the epitope for MAB F2G5 undergo intraspecies size variation. Antigenic variation of adhesins may be a pathogenic mechanism utilized by *M. hyopneumoniae* to evade the porcine immune system.

L4 ANSWER 9 OF 15 USPATFULL on STN  
AN 94:64248 USPATFULL  
TI Method for protection of swine against pleuropneumonia  
IN Ross, Richard F., Ames, IA, United States  
Chaing, Yu-Wei, St. Joseph, MO, United States  
Young, Theresa F., Ames, IA, United States  
Rapp-Gabrielson, Vicki, Fargo, ND, United States  
PA Iowa State University Research Foundation, Ames, IA, United States (U.S. corporation)  
PI US 5332572 19940726  
AI US 1990-616238 19901120 (7)  
RLI Continuation-in-part of Ser. No. US 1988-269799, filed on 10 Nov 1988, now abandoned  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Stone, Jacqueline  
LREP Tilton, Fallon, Lungmus & Chestnut  
CLMN Number of Claims: 8  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 522  
AB The respiratory mucosa of swine are sensitized for the production of protective IgA antibodies on infection with *Actinobacillus* (*Haemophilus*) *pleuropneumoniae* by prior administration of a vaccine comprising a protease lysate of the outer membrane (OM) of *A. pleuropneumoniae* cells. The lysate contains native OM lipopolysaccharide together with a protease digest of OM protein. Preferably two doses of the vaccine are successively administered to provide protective antibodies in the respiratory mucosa prior to infection.

L4 ANSWER 10 OF 15 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN DUPLICATE 3  
AN 1994:500817 BIOSIS  
DN PREV199497513817  
TI Glycolipid receptors for attachment of *Mycoplasma hyopneumoniae* to porcine respiratory ciliated cells.  
AU Zhang, Qijing; Young, Theresa F.; Ross, Richard F. [Reprint author]  
CS Vet. Med. Res. Inst., Iowa State Univ., 1802 Elwood Dr., Ames, IA 50011, USA  
SO Infection and Immunity, (1994) Vol. 62, No. 10, pp. 4367-4373. CODEN: INFIBR. ISSN: 0019-9567.  
DT Article  
LA English  
ED Entered STN: 28 Nov 1994  
Last Updated on STN: 28 Nov 1994  
AB Glycolipid receptors for *Mycoplasma hyopneumoniae* attachment were analyzed by using a thin-layer chromatography (TLC) overlay assay. *M. hyopneumoniae* bound specifically to sulfatide, globoside, and

monosialoganglioside GM3. No binding to sphingomyelin, cerebroside, lactosyl ceramide, ceramide trihexoside, monosialogangliosides GM1 and GM2, disialogangliosides (GD1a, GD1b, and GD3), trisialoganglioside (GT1b), cholesterol, cholesterol sulfate, palmitic acid, tripalmitin, or cholesteryl palmitate was detected. Total lipids extracted from cilia of the swine respiratory epithelium, the natural targets of *M. hyopneumoniae* infection, were also separated on TLC plates and overlaid with mycoplasmas. *M. hyopneumoniae* bound specifically to three ciliary glycolipids identified as La, Lb, and Lc. Binding to Lc was stronger than to La and Lb. All three lipids were believed to be sulfated glycolipids, as determined by laminin binding and staining with azure A. Lc was identified as a putative sulfatide because it had a mobility similar to that of authentic sulfatide and comigrated with sulfatide on TLC plates. Laminin bound to La, Lb, and Lc and produced dose-dependent inhibition of adherence of the mycoplasma to the three ciliary receptors. Binding of the mycoplasma to sulfatide, La, Lb, and Lc was partially inhibited by dextran sulfate, heparin, fucoidan, mucin, and chondroitin sulfate B. These substances blocked the adherence of *M. hyopneumoniae* to cilia and ciliated cells as shown in a previous study (Q. Zhang, T. F. Young, and R. F. Ross, *Infect. Immun.* 62:1616-1622, 1994). These results indicate that La, Lb, and Lc are the major native receptors for *M. hyopneumoniae* adherence to ciliated cells.

- L4 ANSWER 11 OF 15 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on  
STN DUPLICATE 4
- AN 1994:272691 BIOSIS
- DN PREV199497285691
- TI Microtiter plate adherence assay and receptor analogs for *Mycoplasma hyopneumoniae*.
- AU Zhang, Qijing; **Young, Theresa F.**; Ross, Richard F. [Reprint author]
- CS Vet. Med. Research Inst., Iowa State Univ., 1802 Elwood Dr., Ames, IA 50011, USA
- SO Infection and Immunity, (1994) Vol. 62, No. 5, pp. 1616-1622.  
CODEN: INFIBR. ISSN: 0019-9567.
- DT Article
- LA English
- ED Entered STN: 24 Jun 1994  
Last Updated on STN: 25 Jun 1994
- AB A microliter plate adherence assay for *Mycoplasma hyopneumoniae* was established by use of purified swine tracheal cilia which contained receptors for the mycoplasmas. *M. hyopneumoniae* bound specifically to plates coated with solubilized cilia. The binding was dependent on both the concentration of cilia and the number of mycoplasmas. Dextran sulfate, heparin, chondroitin sulfate, laminin, mucin, and fucoidan significantly inhibited the binding of the mycoplasmas. The six inhibitors also disrupted the adherence of the mycoplasmas to intact ciliated cells. Preincubation with either mycoplasmas or cilia indicated that heparin, mucin, fucoidan, and chondroitin sulfate interacted with the adhesive molecules on the surface of the mycoplasmas, while laminin blocked the receptors in cilia. The basis for the inhibition induced by dextran sulfate was unknown. Treatment of cilia with neuraminidase appeared to promote adherence of the mycoplasmas, whereas treatment of cilia with sodium metaperiodate decreased binding. These results indicate that receptors for *M. hyopneumoniae* in the ciliated epithelium of the respiratory tract of pigs are glycoconjugate in nature.
- L4 ANSWER 12 OF 15 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on  
STN
- AN 1994:111476 BIOSIS
- DN PREV199497124476
- TI Differentiation of *Mycoplasma hyopneumoniae*, *M. flocculare*, and *M. hyorhinis* on the basis of amplification of a 16S rRNA gene sequence.
- AU Stemke, Gerald W. [Reprint author]; Phan, Robert [Reprint author]; **Young, Theresa F.**; Ross, Richard F.
- CS Dep. Microbiol., Univ. Alberta, Edmonton, Alberta T6G 3E9, Canada
- SO American Journal of Veterinary Research, (1994) Vol. 55, No. 1, pp. 81-84.  
CODEN: AJVRAH. ISSN: 0002-9645.
- DT Article

LA English  
ED Entered STN: 14 Mar 1994  
Last Updated on STN: 14 Mar 1994

AB To differentiate *Mycoplasma hyopneumoniae*, the cause of mycoplasmal pneumonia in pigs, from *M. flocculare* and *M. hyorhinis*, an assay, using the polymerase chain reaction to amplify a segment of the 16S rRNA gene sequence, was developed. The assay was found to be useful for identification of field isolates, as well as for identification of laboratory-adapted strains. Amplification of DNA from *M. hyopneumoniae* and *M. flocculare* resulted in products of 200 and 400 base pairs, respectively. The DNA from *M. hyorhinis* was not amplified. The assay was sensitive enough to detect as little as 1,000 genome equivalents of *M. hyopneumoniae* and *M. flocculare* DNA. Sensitivity was increased 100-fold by increasing the concentration of magnesium ion in the reaction buffer from 2 to 4 mM however, DNA from *M. hyorhinis* was also amplified under these conditions. The DNA from several walled bacteria and from other mycoplasmas was also tested, but none of these DNA samples was amplified, suggesting that the assay was specific for porcine mycoplasmas.

L4 ANSWER 13 OF 15 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN DUPLICATE 5  
AN 1994:101831 BIOSIS  
DN PREV199497114831  
TI The nature and detection of mycoplasmal immunogens.  
AU Ross, R. F. [Reprint author]; **Young, Theresa F.**  
CS Vet. Med. Res. Inst., Iowa State Univ., Ames, IA 50011, USA  
SO Veterinary Microbiology, (1993) Vol. 37, No. 3-4, pp. 369-380.  
Meeting Info.: Conference on Characterization and Quantitation of Immunogens in Veterinary Biologics. Ames, Iowa, USA. May 5-6, 1992.  
CODEN: VMICDQ. ISSN: 0378-1135.

DT Conference; (Meeting)  
Conference; (Meeting Paper)

LA English  
ED Entered STN: 5 Mar 1994  
Last Updated on STN: 5 Mar 1994

L4 ANSWER 14 OF 15 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
AN 1993:357716 BIOSIS  
DN PREV199345041141  
TI Partial characterization of *Mycoplasma hyopneumoniae* adhesins.  
AU Zhang, Qijing; **Young, Theresa F.**; Ross, Richard F.  
CS Iowa State Univ., Ames, Iowa 50011, USA  
SO Abstracts of the General Meeting of the American Society for Microbiology, (1993) Vol. 93, No. 0, pp. 162.  
Meeting Info.: 93rd General Meeting of the American Society for Microbiology. Atlanta, Georgia, USA. May 16-20, 1993.  
ISSN: 1060-2011.

DT Conference; (Meeting)

LA English  
ED Entered STN: 31 Jul 1993  
Last Updated on STN: 31 Jul 1993

L4 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 1987:212183 CAPLUS  
DN 106:212183  
TI Assessment of antibody response of swine infected with *Mycoplasma hyopneumoniae* by immunoblotting  
**Young, Theresa F.**; Ross, Richard F.  
CS Vet. Med. Res. Inst., Iowa State Univ., Ames, IA, 50011, USA  
SO American Journal of Veterinary Research (1987), 48(4), 651-6  
CODEN: AJVRAH; ISSN: 0002-9645

DT Journal  
LA English

AB An immunoblot procedure was used to evaluate porcine antibody response to inoculation with *M. hyopneumoniae*. Mycoplasmas solubilized with SDS were used as antigens. Antibodies to 5 antigens, estimated to be of mol. weight 110,000, 64,000, 50,000, 41,000, and 36,000 daltons (D), were detected in sera collected during the course of induced mycoplasmal pneumonia. M.

hyopneumoniae Antigens, mol. weight 110,000, 50,000, 41,000, and 36,000 D cross-reacted with M. flocculare when antigen prepared from M. flocculare or hyperimmune serum against it were used in the immunoblot procedure. The 36,000-D antigen reacted with M. hyopneumoniae and M. hyorhinis convalescent sera. The 64,000-D M. hyopneumoniae antigen was the only antigen that did not cross-react with M. flocculare or M. hyorhinis. Exposure of immunoblot strips with antigens to trypsin before reacting them with the convalescent sera abolished binding ability of the 110,000-D and 36,000-D antigens, but had no effect on binding by 64,000-D, 50,000-D, or 41,000-D antigens. None of the 5 antigens bound to 11 lectins.

=> e ross richard f/au

E1	1	ROSS RICHARD DONALD/AU
E2	6	ROSS RICHARD E/AU
E3	30 -->	ROSS RICHARD F/AU
E4	1	ROSS RICHARD G/AU
E5	4	ROSS RICHARD H/AU
E6	3	ROSS RICHARD H C L/AU
E7	1	ROSS RICHARD H C LEB/AU
E8	2	ROSS RICHARD H JR/AU
E9	1	ROSS RICHARD HENRY JR/AU
E10	119	ROSS RICHARD J/AU
E11	37	ROSS RICHARD J M/AU
E12	1	ROSS RICHARD JOHN/AU

=> s e3

L5 30 "ROSS RICHARD F"/AU

=> dup rem 15

PROCESSING COMPLETED FOR L5

L6 22 DUP REM L5 (8 DUPLICATES REMOVED)

=> d bib ab 1-

YOU HAVE REQUESTED DATA FROM 22 ANSWERS - CONTINUE? Y/(N):y

L6 ANSWER 1 OF 22 USPATFULL on STN

AN 2005:330188 USPATFULL

TI Mycoplasma polypeptides

IN Hsu, Walter H., 2725 Northridge Circle, Ames, IA, UNITED STATES 50014

Young, Theresa F., Carlsbad, CA, UNITED STATES

Ross, Richard F., Ames, IA, UNITED STATES

Zhou, En-Min, Ames, IA, UNITED STATES

PA Iowa State University Research Foundation, Inc., Ames, IA, UNITED

STATES, 50011-2131 (U.S. corporation)

PI US 2005287163 A1 20051229

AI US 2003-509926 A1 20030404 (10)

WO 2003-US10305 20030404

20050729 PCT 371 date

PRAI US 2003-370344P 20020405 (60)

DT Utility

FS APPLICATION

LREP FISH & RICHARDSON P.C., PO BOX 1022, MINNEAPOLIS, MN, 55440-1022, US

CLMN Number of Claims: 33

ECL Exemplary Claim: 1

DRWN 15 Drawing Page(s)

LN.CNT 1268

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides methods and materials related to mycoplasma. For example, the invention provides mycoplasma polypeptides having the ability to increase calcium release from cells (e.g., porcine ciliated tracheal cells) as well as antibodies that bind to such mycoplasma polypeptides. In addition, the invention provides methods for identifying inhibitors of mycoplasma-induced calcium release from porcine ciliated tracheal cells.

L6 ANSWER 2 OF 22 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:836908 CAPLUS

DN 139:336910

TI Mycoplasma hyopneumoniae polypeptides inducing calcium release from  
ciliated tracheal cells  
IN Hsu, Walter H.; Young, Theresa F.; Ross, Richard F.; Zhou,  
En-Min  
PA Iowa State University Research Foundation, Inc., USA  
SO PCT Int. Appl., 49 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003086473	A1	20031023	WO 2003-US10305	20030404
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2481042	AA	20031023	CA 2003-2481042	20030404
	AU 2003221791	A1	20031027	AU 2003-221791	20030404
	EP 1496945	A1	20050119	EP 2003-718191	20030404
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	CN 1658906	A	20050824	CN 2003-813128	20030404
	JP 2005535573	T2	20051124	JP 2003-583487	20030404
	US 2005287163	A1	20051229	US 2005-509926	20050729
PRAI	US 2002-370344P	P	20020405		
	WO 2003-US10305	W	20030404		

AB The authors disclose mycoplasma polypeptides having the ability to  
increase calcium release from cells (e.g., porcine ciliated tracheal  
cells) as well as antibodies that bind to such mycoplasma polypeptides.  
In addition, the invention provides methods for identifying inhibitors of  
mycoplasma-induced calcium release from porcine ciliated tracheal cells.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 22 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
DUPLICATE 1  
AN 2002:296991 BIOSIS  
DN PREV200200296991  
TI Mycoplasma hyopneumoniae increases intracellular calcium release in  
porcine ciliated tracheal cells.  
AU Park, Seung-Chun; Yibchok-Anun, Sirintorn; Cheng, Henrique; Young, Theresa  
F.; Thacker, Eileen L.; Minion, F. Chris; Ross, Richard F.; Hsu,  
Walter H. [Reprint author]  
CS Department of Biomedical Sciences, Iowa State University, Ames, IA, 50011,  
USA  
whsu@iastate.edu  
SO Infection and Immunity, (May, 2002) Vol. 70, No. 5, pp. 2502-2506. print.  
CODEN: INFIBR. ISSN: 0019-9567.  
DT Article  
LA English  
ED Entered STN: 15 May 2002  
Last Updated on STN: 15 May 2002  
AB We investigated the effects of intact pathogenic Mycoplasma hyopneumoniae,  
nonpathogenic M. hyopneumoniae, and Mycoplasma flocculare on intracellular  
free Ca<sup>2+</sup> concentrations ((Ca<sup>2+</sup>)<sub>i</sub>) in porcine ciliated tracheal epithelial  
cells. The ciliated epithelial cells had basal (Ca<sup>2+</sup>)<sub>i</sub> of 103 +/- 3 nM (n  
= 217 cells). The (Ca<sup>2+</sup>)<sub>i</sub> increased by 250 +/- 19 nM (n = 47 cells) from  
the basal level within 100 s of the addition of pathogenic M.  
hyopneumoniae strain 91-3 (300 mug/ml), and this increase lasted apprx60  
s. In contrast, nonpathogenic M. hyopneumoniae and M. flocculare at  
concentrations of 300 mug/ml failed to increase (Ca<sup>2+</sup>)<sub>i</sub>. In Ca<sup>2+</sup>-free  
medium, pathogenic M. hyopneumoniae still increased (Ca<sup>2+</sup>)<sub>i</sub>, in tracheal



cells. Pretreatment with thapsigargin (1  $\mu$ M for 30 min), which depleted the  $\text{Ca}^{2+}$  store in the endoplasmic reticulum, abolished the effect of *M. hyopneumoniae*. Pretreatment with pertussis toxin (100 ng/ml for 3 h) or U-73122 (2  $\mu$ M for 100 s), an inhibitor of phospholipase C, also abolished the effect of *M. hyopneumoniae*. The administration of mastoparan 7, an activator of pertussis toxin-sensitive proteins Gi and Go, increased ( $\text{Ca}^{2+}$ )<sub>i</sub> in ciliated tracheal cells. These results suggest that pathogenic *M. hyopneumoniae* activates receptors that are coupled to Gi or Go, which in turn activates a phospholipase C pathway, thereby releasing  $\text{Ca}^{2+}$  from the endoplasmic reticulum. Thus, an increase in  $\text{Ca}^{2+}$  may serve as a signal for the pathogenesis of *M. hyopneumoniae*.

L6 ANSWER 4 OF 22 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
AN 2000:159739 BIOSIS  
DN PREV200000159739

TI A tissue culture system to study respiratory ciliary epithelial adherence of selected swine mycoplasmas.

AU Young, Theresa F.; Thacker, Eileen L. [Reprint author]; Erickson, Barbara Z.; **Ross, Richard F.**

CS College of Veterinary Medicine, Veterinary Medical Research Institute, Iowa State University, 1802 Elwood Drive, Ames, IA, 50011, USA

SO Veterinary Microbiology, (Feb., 2000) Vol. 71, No. 3-4, pp. 269-279. print.

CODEN: VMICDQ. ISSN: 0378-1135.

DT Article

LA English

ED Entered STN: 26 Apr 2000

Last Updated on STN: 4 Jan 2002

AB An in vitro culture system for swine tracheal epithelial cells was developed to study the adherence of swine mycoplasmas. Swine tracheal epithelial cells were isolated by enzymatic digestion and cultured on microporous membranes. Growth medium was placed under the membrane support to create air-liquid interface feeding resulting in the cells growing cilia and microvilli on the apical surface. Two strains of *Mycoplasma hyopneumoniae* (pathogenic strain 91-3 and non-pathogenic type strain J) and two strains of *Mycoplasma flocculare* (type strain Ms42 and field isolate 7160T) were used in this study. The morphology of the cultured tracheal cells was evaluated by transmission electron microscopy. Adherence of *M. hyopneumoniae* and *M. flocculare* and damage to the cilia were demonstrated using scanning electron microscopy. The pathogenic *M. hyopneumoniae* strain 91-3 adhered to cilia inducing obvious damage. The non-pathogenic *M. hyopneumoniae* strain J did not adhere to mature cilia. Both *M. flocculare* strains Ms42 and 7160T adhered to mature and budding cilia. No obvious ciliary damage was observed with strain Ms42. Minimal damage consisting of a slight tangling of the cilia occurred after adherence by strain 7160T. This model will enable us to further study the role of adherence of mycoplasmas on the pathogenesis of swine pneumonia.

L6 ANSWER 5 OF 22 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
AN 1999:157072 BIOSIS  
DN PREV199900157072

TI *Mycoplasma hyopneumoniae* potentiation of porcine reproductive and respiratory syndrome virus-induced pneumonia.

AU Thacker, Eileen L. [Reprint author]; Halbur, Patrick G.; **Ross, Richard F.**; Thanawongnuwech, Roongroje; Thacker, Brad J.

CS VMRI, Iowa State Univ., 1802 Elwood Dr., Ames, IA 50011, USA

SO Journal of Clinical Microbiology, (March, 1999) Vol. 37, No. 3, pp. 620-627. print.

CODEN: JCMIDW. ISSN: 0095-1137.

DT Article

LA English

ED Entered STN: 16 Apr 1999

Last Updated on STN: 16 Apr 1999

AB An experimental model that demonstrates a mycoplasma species acting to potentiate a viral pneumonia was developed. *Mycoplasma hyopneumoniae*, which produces a chronic, lymphohistiocytic bronchopneumonia in pigs, was found to potentiate the severity and the duration of a virus-induced pneumonia in pigs. Pigs were inoculated with *M. hyopneumoniae* 21 days prior to, simultaneously with, or 10 days after inoculation with porcine

reproductive and respiratory syndrome virus (PRRSV), which induces an acute interstitial pneumonia in pigs. PRRSV-induced clinical respiratory disease and macroscopic and microscopic pneumonic lesions were more severe and persistent in M. hyopneumoniae-infected pigs. At 28 or 38 days after PRRSV inoculation, M. hyopneumoniae-infected pigs still exhibited lesions typical of PRRSV-induced pneumonia, whereas the lungs of pigs which had received only PRRSV were essentially normal. On the basis of macroscopic lung lesions, it appears that PRRSV infection did not influence the severity of M. hyopneumoniae infection, although microscopic lesions typical of M. hyopneumoniae were more severe in PRRSV-infected pigs. These results indicate that M. hyopneumoniae infection potentiates PRRSV-induced disease and lesions. Most importantly, M. hyopneumoniae-infected pigs with minimal to nondetectable mycoplasmal pneumonia lesions manifested significantly increased PRRSV-induced pneumonia lesions compared to pigs infected with PRRSV only. This discovery is important with respect to the control of respiratory disease in pigs and has implications in elucidating the potential contribution of mycoplasmas in the pathogenesis of viral infections of other species, including humans.

L6 ANSWER 6 OF 22 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
 AN 1996:344543 BIOSIS  
 DN PREV199699066899  
 TI Mycoplasma infections of swine.  
 AU Ross, Richard F. [Reprint author]; Stemke, Gerald W.  
 CS Coll. Vet. Med., Iowa State Univ., Ames, IA 50011, USA  
 SO Tully, J. G.; Razin, S. (1996) pp. 275-281. Molecular and diagnostic procedures in mycoplasmaology, Vol. 2. Diagnostic procedures. Publisher: Academic Press, Inc., 1250 Sixth Ave., San Diego, California 92101, USA; Academic Press Ltd., 14 Belgrave Square, 24-28 Oval Road, London NW1 70X, England, UK. ISBN: 0-12-583806-9.  
 DT Book  
 Book; (Book Chapter)  
 LA English  
 ED Entered STN: 5 Aug 1996  
 Last Updated on STN: 5 Aug 1996

L6 ANSWER 7 OF 22 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
 AN 1996:344552 BIOSIS  
 DN PREV199699066908  
 TI Experimental infections of swine.  
 AU Kobisch, Marylene [Reprint author]; Ross, Richard F.  
 CS Cent. Natl. Etudes Vet. Alimentaires, Station Pathologie Porcine, F-22440 Ploufragan, France  
 SO Tully, J. G.; Razin, S. (1996) pp. 371-376. Molecular and diagnostic procedures in mycoplasmaology, Vol. 2. Diagnostic procedures. Publisher: Academic Press, Inc., 1250 Sixth Ave., San Diego, California 92101, USA; Academic Press Ltd., 14 Belgrave Square, 24-28 Oval Road, London NW1 70X, England, UK. ISBN: 0-12-583806-9.  
 DT Book  
 Book; (Book Chapter)  
 LA English  
 ED Entered STN: 5 Aug 1996  
 Last Updated on STN: 5 Aug 1996

L6 ANSWER 8 OF 22 CAPLUS COPYRIGHT 2006 ACS on STN  
 AN 1995:586552 CAPLUS  
 DN 123:5153  
 TI Characterization of Mycoplasma hyopneumoniae adhesins  
 IN Ross, Richard F.; Young, Theresa F.; Zhang, Qijing  
 PA Iowa State University Research Foundation, Inc., USA  
 SO PCT Int. Appl., 84 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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 PI WO 9509870 A1 19950413 WO 1994-US11320 19941005  
 W: CN, CZ, NO, PL  
 RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE  
 PRAI US 1993-132798 A 19931007  
 US 1994-274897 A 19940714  
 AB The present invention provides for the identification, purification and characterization of *M. hyopneumoniae* adhesins and their use in vaccines and diagnostic testing. The *M. hyopneumoniae* adhesins of the invention were purified by an affinity chromatog. procedure which incorporates a novel *M. hyopneumoniae* receptor analog for the attachment and/or removal of the adhesins from a mycoplasmal preparation. In another aspect of the invention, there is provided an in vitro microtiter plate adherence assay for the characterization of *M. hyopneumoniae* and adhesins thereof. In addition, the effect of passage level on adherence of *M. hyopneumoniae* was evaluated; the selection of high-adherent and low-adherent clones conducted; and monoclonal antibodies against the adhesins were raised and used to study adherence inhibition.

L6 ANSWER 9 OF 22 USPATFULL on STN  
 AN 94:64248 USPATFULL  
 TI Method for protection of swine against pleuropneumonia  
 IN **Ross, Richard F.**, Ames, IA, United States  
 Chaing, Yu-Wei, St. Joseph, MO, United States  
 Young, Theresa F., Ames, IA, United States  
 Rapp-Gabrielson, Vicki, Fargo, ND, United States  
 PA Iowa State University Research Foundation, Ames, IA, United States (U.S. corporation)  
 PI US 5332572 19940726  
 AI US 1990-616238 19901120 (7)  
 RLI Continuation-in-part of Ser. No. US 1988-269799, filed on 10 Nov 1988, now abandoned  
 DT Utility  
 FS Granted  
 EXNAM Primary Examiner: Stone, Jacqueline  
 LREP Tilton, Fallon, Lungmus & Chestnut  
 CLMN Number of Claims: 8  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 522  
 AB The respiratory mucosa of swine are sensitized for the production of protective IgA antibodies on infection with *Actinobacillus* (*Haemophilus*) *pleuropneumoniae* by prior administration of a vaccine comprising a protease lysate of the outer membrane (OM) of *A. pleuropneumoniae* cells. The lysate contains native OM lipopolysaccharide together with a protease digest of OM protein. Preferably two doses of the vaccine are successively administered to provide protective antibodies in the respiratory mucosa prior to infection.

L6 ANSWER 10 OF 22 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN DUPLICATE 2  
 AN 1995:36231 BIOSIS  
 DN PREV199598050531  
 TI Ciliostasis and Loss of Cilia Induced by *Mycoplasma hyopneumoniae* in Porcine Tracheal Organ Cultures.  
 AU Debey, Mary C.; **Ross, Richard F.** [Reprint author]  
 CS Vet. Med. Res. Inst., Iowa State Univ., 1802 Elwood Dr., Ames, IA 50011, USA  
 SO Infection and Immunity, (1994) Vol. 62, No. 12, pp. 5312-5318.  
 CODEN: INFIBR. ISSN: 0019-9567.  
 DT Article  
 LA English  
 ED Entered STN: 25 Jan 1995  
 Last Updated on STN: 25 Jan 1995  
 AB In vivo- and in vitro-grown *Mycoplasma hyopneumoniae* organisms were inoculated onto newborn piglet tracheal organ cultures to provide a model for interaction of this organism with ciliated respiratory epithelium. Ciliostasis and loss of cilia in tracheal rings were induced by *M. hyopneumoniae* grown in vivo and with low-passage cultures when grown in

vitro. Levels of calmodulin or dehydrogenase enzymes in tracheal ring epithelium were not altered even though ciliostasis and loss of cilia induced by *M. hyopneumoniae* were extensive. The capacity for inducing epithelial damage diminished with in vitro passage of the organism. Attempts to induce higher-passage cultures to attach to cilia, cause ciliostasis, or cause ciliary damage by supplementation of mycoplasma medium with porcine lung extract failed. Epithelial damage induced by *M. hyopneumoniae* in tracheal rings was averted by using porcine immune serum or by separating the organisms from ciliated epithelium with a 0.1- $\mu$ m-pore-size membrane. Attachment, or at least close association, of *M. hyopneumoniae* to ciliated epithelium appeared to be necessary to induce ciliostasis and loss of cilia in this model.

L6 ANSWER 11 OF 22 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on  
STN DUPLICATE 3  
AN 1994:500817 BIOSIS  
DN PREV199497513817  
TI Glycolipid receptors for attachment of *Mycoplasma hyopneumoniae* to porcine  
respiratory ciliated cells.  
AU Zhang, Qijing; Young, Theresa F.; Ross, Richard F. [Reprint  
author]  
CS Vet. Med. Res. Inst., Iowa State Univ., 1802 Elwood Dr., Ames, IA 50011,  
USA  
SO Infection and Immunity, (1994) Vol. 62, No. 10, pp. 4367-4373.  
CODEN: INFIBR. ISSN: 0019-9567.  
DT Article  
LA English  
ED Entered STN: 28 Nov 1994  
Last Updated on STN: 28 Nov 1994  
AB Glycolipid receptors for *Mycoplasma hyopneumoniae* attachment were analyzed  
by using a thin-layer chromatography (TLC) overlay assay. *M.*  
*hyopneumoniae* bound specifically to sulfatide, globoside, and  
monosialoganglioside GM3. No binding to sphingomyelin, cerebroside,  
lactosyl ceramide, ceramide trihexoside, monosialogangliosides GM1 and  
GM2, disialogangliosides (GD1a, GD1b, and GD3), trisialoganglioside  
(GT1b), cholesterol, cholesterol sulfate, palmitic acid, tripalmitin, or  
cholesteryl palmitate was detected. Total lipids extracted from cilia of  
the swine respiratory epithelium, the natural targets of *M. hyopneumoniae*  
infection, were also separated on TLC plates and overlaid with  
mycoplasmas. *M. hyopneumoniae* bound specifically to three ciliary  
glycolipids identified as La, Lb, and Lc. Binding to Lc was stronger than  
to La and Lb. All three lipids were believed to be sulfated glycolipids,  
as determined by laminin binding and staining with azure A. Lc was  
identified as a putative sulfatide because it had a mobility similar to  
that of authentic sulfatide and comigrated with sulfatide on TLC plates.  
Laminin bound to La, Lb, and Lc and produced dose-dependent inhibition of  
adherence of the mycoplasma to the three ciliary receptors. Binding of  
the mycoplasma to sulfatide, La, Lb, and Lc was partially inhibited by  
dextran sulfate, heparin, fucoidan, mucin, and chondroitin sulfate B.  
These substances blocked the adherence of *M. hyopneumoniae* to cilia and  
ciliated cells as shown in a previous study (Q. Zhang, T. F. Young, and  
R. F. Ross, *Infect. Immun.* 62:1616-1622, 1994). These results indicate  
that La, Lb, and Lc are the major native receptors for *M. hyopneumoniae*  
adherence to ciliated cells.

L6 ANSWER 12 OF 22 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on  
STN DUPLICATE 4  
AN 1994:272691 BIOSIS  
DN PREV199497285691  
TI Microtiter plate adherence assay and receptor analogs for *Mycoplasma*  
*hyopneumoniae*.  
AU Zhang, Qijing; Young, Theresa F.; Ross, Richard F. [Reprint  
author]  
CS Vet. Med. Research Inst., Iowa State Univ., 1802 Elwood Dr., Ames, IA  
50011, USA  
SO Infection and Immunity, (1994) Vol. 62, No. 5, pp. 1616-1622.  
CODEN: INFIBR. ISSN: 0019-9567.  
DT Article  
LA English

ED Entered STN: 24 Jun 1994  
 Last Updated on STN: 25 Jun 1994

AB A microliter plate adherence assay for *Mycoplasma hyopneumoniae* was established by use of purified swine tracheal cilia which contained receptors for the mycoplasmas. *M. hyopneumoniae* bound specifically to plates coated with solubilized cilia. The binding was dependent on both the concentration of cilia and the number of mycoplasmas. Dextran sulfate, heparin, chondroitin sulfate, laminin, mucin, and fucoidan significantly inhibited the binding of the mycoplasmas. The six inhibitors also disrupted the adherence of the mycoplasmas to intact ciliated cells. Preincubation with either mycoplasmas or cilia indicated that heparin, mucin, fucoidan, and chondroitin sulfate interacted with the adhesive molecules on the surface of the mycoplasmas, while laminin blocked the receptors in cilia. The basis for the inhibition induced by dextran sulfate was unknown. Treatment of cilia with neuraminidase appeared to promote adherence of the mycoplasmas, whereas treatment of cilia with sodium metaperiodate decreased binding. These results indicate that receptors for *M. hyopneumoniae* in the ciliated epithelium of the respiratory tract of pigs are glycoconjugate in nature.

L6 ANSWER 13 OF 22 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on  
 STN DUPLICATE 5

AN 1994:111476 BIOSIS  
 DN PREV199497124476  
 TI Differentiation of *Mycoplasma hyopneumoniae*, *M. flocculare*, and *M. hyorhinis* on the basis of amplification of a 16S rRNA gene sequence.  
 AU Stemke, Gerald W. [Reprint author]; Phan, Robert [Reprint author]; Young, Theresa F.; **Ross, Richard F.**  
 CS Dep. Microbiol., Univ. Alberta, Edmonton, Alberta T6G 3E9, Canada  
 SO American Journal of Veterinary Research, (1994) Vol. 55, No. 1, pp. 81-84.  
 CODEN: AJVRAH. ISSN: 0002-9645.  
 DT Article  
 LA English  
 ED Entered STN: 14 Mar 1994  
 Last Updated on STN: 14 Mar 1994

AB To differentiate *Mycoplasma hyopneumoniae*, the cause of mycoplasmal pneumonia in pigs, from *M. flocculare* and *M. hyorhinis*, an assay, using the polymerase chain reaction to amplify a segment of the 16S rRNA gene sequence, was developed. The assay was found to be useful for identification of field isolates, as well as for identification of laboratory-adapted strains. Amplification of DNA from *M. hyopneumoniae* and *M. flocculare* resulted in products of 200 and 400 base pairs, respectively. The DNA from *M. hyorhinis* was not amplified. The assay was sensitive enough to detect as little as 1,000 genome equivalents of *M. hyopneumoniae* and *M. flocculare* DNA. Sensitivity was increased 100-fold by increasing the concentration of magnesium ion in the reaction buffer from 2 to 4 mM however, DNA from *M. hyorhinis* was also amplified under these conditions. The DNA from several walled bacteria and from other mycoplasmas was also tested, but none of these DNA samples was amplified, suggesting that the assay was specific for porcine mycoplasmas.

L6 ANSWER 14 OF 22 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on  
 STN DUPLICATE 6

AN 1993:462128 BIOSIS  
 DN PREV199396107028  
 TI Adherence of *Mycoplasma hyopneumoniae* to porcine ciliated respiratory tract cells.  
 AU Zielinski, Gustavo C.; **Ross, Richard F.** [Reprint author]  
 CS Vet. Med. Res. Inst., Coll. Vet. Med., Iowa State Univ., Ames, IA 50011, USA  
 SO American Journal of Veterinary Research, (1993) Vol. 54, No. 8, pp. 1262-1269.  
 CODEN: AJVRAH. ISSN: 0002-9645.  
 DT Article  
 LA English  
 ED Entered STN: 5 Oct 1993  
 Last Updated on STN: 5 Oct 1993

AB Adherence of *Mycoplasma hyopneumoniae* to the mucosa of the distal portion of the respiratory tract of swine is an important initial event in

development of mycoplasmal pneumonia. A suitable in vitro model of adherence would be useful for investigation of mycoplasmal and host cell factors involved in this process. We have developed an adherence assay, using suspensions of porcine respiratory tract ciliated epithelial cells and *M. hyopneumoniae*. Tracheal epithelial cells, collected by use of cytologic brushes, were mixed with broth cultures of *M. hyopneumoniae* and the mixtures were incubated, diluted, vortexed, and sedimented. Pellets were spread on glass slides, stained with a fluorescent antibody against *M. hyopneumoniae*, and evaluated by fluorescent microscopy. Fluorescence was observed principally among cilia on the ciliated tufts of epithelial cells. Only a few organisms were observed adhering on the nonciliated parts of ciliated cells or on other cell types. When mycoplasmas were preincubated with low dilutions of serum from swine convalescing from *M. hyopneumoniae* disease, attachment was partially inhibited ( $P < 0.05$ ). Significant inhibition of attachment was not observed when organisms were preincubated with higher dilutions of convalescent serum, with purified IgG from hyperimmune serum against *M. hyopneumoniae*, or with low dilutions of lung lavage fluids (from convalescent swine) that contained specific IgA antibodies against *M. hyopneumoniae*. Preincubation of the organisms with periodate and trypsin abolished attachment and formaldehyde decreased it ( $P < 0.05$ ), whereas a variety of carbohydrates had no effect on attachment. Preincubation with dextran sulfate, ammonium sulfate, magnesium sulfate, and methionine reduced attachment ( $P < 0.05$ ). Treatment of cell-Mycoplasma mixtures with the hydrophobic bond-breaking agent tetramethylurea, or incubation in absence of salt, or at low temperature also reduced attachment ( $P < 0.05$ ). Attachment was not observed when ovine, rabbit, or guinea pig ciliated respiratory tract cells were mixed with *M. hyopneumoniae*. Attachment of *M. dispar* to porcine ciliated cells could not be detected, whereas *M. hyorhinis* attached nonspecifically to all cell types in suspensions of porcine tracheal mucosa. These results indicate that adherence of *M. hyopneumoniae* may be a host-specific event that is mediated by proteins and carbohydrates on the surface of the organism and by sulfur-containing molecules in the host cell membrane. The highly polarized location of the mycoplasmas on the cilia of epithelial cells indicates possible existence of stereospecific interactions between mycoplasmal adhesin(s) and receptor(s) on host cells. However, decreased adherence obtained by incubating Mycoplasma-ciliated cell mixtures with tetramethyl-urea, by incubating mixtures in absence of salt or at low temperature, indicates that nonspecific hydrophobic interactions might have a role in the attachment process.

L6 ANSWER 15 OF 22 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on  
STN DUPLICATE 7  
AN 1994:29987 BIOSIS  
DN PREV199497042987  
TI Adaptation of the sensititre broth microdilution technique to  
antimicrobial susceptibility testing of Mycoplasma hyopneumoniae.  
AU Tanner, Alun C. [Reprint author]; Erickson, Barbara Z.; Ross, Richard  
F.  
CS Pfizer Inc., P.O. Box 88, Terre Haute, IN 47808, USA  
SO Veterinary Microbiology, (1993) Vol. 36, No. 3-4, pp. 301-306.  
CODEN: VMICDQ. ISSN: 0378-1135.  
DT Article  
LA English  
ED Entered STN: 27 Jan 1994  
Last Updated on STN: 27 Jan 1994  
AB A broth microdilution technique is described for determining the  
antimicrobial susceptibility of Mycoplasma hyopneumoniae, using  
commercially prepared Sensititre plates. Twenty-five field isolates and  
two reference strains (J and 232), were tested against seven  
antimicrobials. Field isolates were tested in duplicate and reference  
strains, four times to estimate reproducibility. Ninety-seven percent of  
the duplicate MIC results for the field isolates were in agreement, or  
within one log-2 dilution. Similar results were obtained with the  
reference strains. The isolates were susceptible to lincomycin-  
spectinomycin, tylosin and oxytetracycline or resistant to amoxycillin,  
apramycin and erythromycin. Susceptibility to furaltadone varied. The  
method retains the accuracy and reproducibility of broth MIC

determinations, while avoiding the lengthy preparation of antimicrobial dilutions normally associated with more traditional methods.

- L6 ANSWER 16 OF 22 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on  
STN  
AN 1993:357716 BIOSIS  
DN PREV199345041141  
TI Partial characterization of Mycoplasma hyopneumoniae adhesins.  
AU Zhang, Qijing; Young, Theresa F.; **Ross, Richard F.**  
CS Iowa State Univ., Ames, Iowa 50011, USA  
SO Abstracts of the General Meeting of the American Society for Microbiology,  
(1993) Vol. 93, No. 0, pp. 162.  
Meeting Info.: 93rd General Meeting of the American Society for  
Microbiology. Atlanta, Georgia, USA. May 16-20, 1993.  
ISSN: 1060-2011.  
DT Conference; (Meeting)  
LA English  
ED Entered STN: 31 Jul 1993  
Last Updated on STN: 31 Jul 1993
- L6 ANSWER 17 OF 22 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 1987:212183 CAPLUS  
DN 106:212183  
TI Assessment of antibody response of swine infected with Mycoplasma  
hyopneumoniae by immunoblotting  
AU Young, Theresa F.; **Ross, Richard F.**  
CS Vet. Med. Res. Inst., Iowa State Univ., Ames, IA, 50011, USA  
SO American Journal of Veterinary Research (1987), 48(4), 651-6  
CODEN: AJVRAH; ISSN: 0002-9645  
DT Journal  
LA English  
AB An immunoblot procedure was used to evaluate porcine antibody response to  
inoculation with M. hyopneumoniae. Mycoplasmas solubilized with SDS were  
used as antigens. Antibodies to 5 antigens, estimated to be of mol. weight  
110,000, 64,000, 50,000, 41,000, and 36,000 daltons (D), were detected in  
sera collected during the course of induced mycoplasmal pneumonia. M.  
hyopneumoniae Antigens, mol. weight 110,000, 50,000, 41,000, and 36,000 D  
cross-reacted with M. flocculare when antigen prepared from M. flocculare or  
hyperimmune serum against it were used in the immunoblot procedure. The  
36,000-D antigen reacted with M. hyopneumoniae and M. hyorhinis  
convalescent sera. The 64,000-D M. hyopneumoniae antigen was the only  
antigen that did not cross-react with M. flocculare or M. hyorhinis.  
Exposure of immunoblot strips with antigens to trypsin before reacting  
them with the convalescent sera abolished binding ability of the 110,000-D  
and 36,000-D antigens, but had no effect on binding by 64,000-D, 50,000-D,  
or 41,000-D antigens. None of the 5 antigens bound to 11 lectins.
- L6 ANSWER 18 OF 22 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 1987:16766 CAPLUS  
DN 106:16766  
TI Antibody response of swine to outer membrane components of Haemophilus  
pleuropneumoniae during infection  
AU Rapp, Vicki J.; **Ross, Richard F.**  
CS Coll. Vet. Med., Iowa State Univ., Ames, IA, 50011, USA  
SO Infection and Immunity (1986), 54(3), 751-60  
CODEN: INFIBR; ISSN: 0019-9567  
DT Journal  
LA English  
AB Sera from pigs infected with H. (Actinobacillus) pleuropneumoniae were  
tested for antibodies to outer membrane proteins (OMPs) of the organism by  
immunoblotting. Convalescent sera were produced in naturally born,  
colostrum-fed pigs and in cesarean-derived, colostrum-deprived pigs given  
H. pleuropneumoniae serotype 5 intranasally twice at 5-wk intervals.  
Sera, collected at weekly intervals, were reacted with Sarkosyl-insol.,  
OMP-enriched preps. of H. pleuropneumoniae which had been separated by  
SDS-PAGE and electrophoretically transferred to nitrocellulose.  
Antibodies were detected to OMPs with an apparent mol. weight of 16,500  
(16.5K OMP); to 29K, 38.5K, 43.5K, 45K, 49.5K, and 66.5K OMPs; and to  
several high-mol.-weight ( $\geq 94,000$ ) OMPs, but not to the major 42K OMP.

Antibodies to the heat-modifiable OMP (29K/43.5K) and the 38.5K OMP were detected in sera from noninfected pigs. Antibodies were also detected to 2 broad 54,000- and 95,000-mol.-weight bands which did not stain with Coomassie blue, stained with silver nitrate, resisted proteinase K digestion, and were eliminated by oxidation with sodium metaperiodate. This indicates that the 54,000- and 95,000-mol.-weight bands represent polysaccharide, possibly capsular or lipopolysaccharide immunogens. Adsorption of sera with cells from the homologous serotype 5 strain removed antibodies to the 45K, 49.5K, 66.5K, and  $\geq 94$ K OMPs and to the 2 polysaccharide bands, indicating that these antibodies were directed primarily to surface-exposed epitopes. When tested with OMP preps. from other serotype 5 strains, heterogeneity was apparent, both in the reactions with OMPs and with the polysaccharide bands. Silver staining of proteinase K-treated, whole-cell lysates from serotype 5 strains also indicated variable expression of the polysaccharide bands. Sera also reacted with OMPs from *H. pleuropneumoniae* serotypes 1 and 7; however, several OMPs and the lipopolysaccharide or polysaccharide determinants of these serotypes appeared to be type-specific.

L6 ANSWER 19 OF 22 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1986:221747 CAPLUS

DN 104:221747

TI Outer membrane protein profiles of *Haemophilus pleuropneumoniae*

AU Rapp, Vicki J.; Munson, Robert S., Jr.; Ross, Richard F.

CS Coll. Vet. Med., Iowa State Univ., Ames, IA, 50011, USA

SO Infection and Immunity (1986), 52(2), 414-20

CODEN: INFIBR; ISSN: 0019-9567

DT Journal

LA English

AB Outer membrane protein profiles of *H. pleuropneumoniae* were examined by SDS-polyacrylamide gel electrophoresis. Cells were disrupted by sonication, and outer membrane-enriched fractions were prepared by differential centrifugation and selective solubilization of the inner membrane with sodium N-lauroyl sarcosinate. Colony type, growth medium, time of harvest, and in vitro or in vivo passage had no appreciable effect on the protein profiles of the strains examined. Seven patterns were distinguished among the reference strains of the 8 capsular serotypes. These patterns were based on the mobility of the major outer membrane proteins migrating in the 39,000-44,000-mol.-weight region of the gel, a 16-16.5 kilodalton (K) protein, and a heat-modifiable 29 K protein. Strains of serotypes 1 and 9 had identical outer membrane protein profiles, as did strains of serotypes 2 and 6. The reference strains of the remaining 5 serotypes each had a distinct pattern. The outer membrane protein profiles of 95 field isolates belonging to serotypes 1, 5, 7, and 9 from swine in the midwestern United States were determined and compared with the reference patterns. The results indicate that the population of *H. pleuropneumoniae* is clonal, with 3 predominant clones distinguished by both serotype and outer membrane protein profile responsible for the majority of *H. pleuropneumoniae* disease occurring in swine in the United States.

L6 ANSWER 20 OF 22 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1984:82608 CAPLUS

DN 100:82608

TI Restriction endonuclease analyses of two porcine mycoplasma deoxyribonucleic acids: sequence-specific methylation in the *Mycoplasma hyopneumoniae* genome

AU Chan, Hardy W.; Ross, Richard F.

CS Inst. Bio-Org. Chem., Syntex Res., Palo Alto, CA, 94304, USA

SO International Journal of Systematic Bacteriology (1984), 34(1), 16-20

CODEN: IJSBA8; ISSN: 0020-7713

DT Journal

LA English

AB The DNAs of 2 porcine mycoplasmas, *M. hyopneumoniae* and *M. flocculare*, were distinguished readily with restriction enzymes. Enzymes that recognized guanine-plus-cytosine-rich sequences, such as *Sma*I and *Bam*HI, were particularly useful since they generated relatively small nos. of DNA fragments which could be resolved by gel electrophoresis. In addition, the adenine nucleotide in the GATC sequence of *M. hyopneumoniae* is methylated,



whereas that in M. flocculare is not.

L6 ANSWER 21 OF 22 USPATFULL on STN  
AN 79:40070 USPATFULL  
TI Stove  
IN Ross, Richard F., 103 Washington St., Mendon, MA, United  
States 01756  
PI US 253068 19791002  
AI US 1977-849010 19771107 (5)  
PTERM 14 Years  
DT Design  
FS Granted  
EXNAM Primary Examiner: Burke, Wallace R.; Assistant Examiner: Kemper,  
Catherine  
LREP Driscoll, David M.  
CLMN Number of Claims: 1  
ECL Exemplary Claim: 1  
DRWN 7 Drawing Figure(s); 2 Drawing Page(s)  
LN.CNT 8

L6 ANSWER 22 OF 22 USPATFULL on STN  
AN 78:65186 USPATFULL  
TI Shell for sled  
IN Ross, Richard F., 103 Washington St., Mendon, MA, United  
States 01756  
PA American Zephyr Corporation, Intervale, NH, United States (U.S.  
corporation)  
PI US 250403 19781128  
AI US 1977-804110 19770606 (5)  
PTERM 14 Years  
DT Design  
FS Granted  
EXNAM Primary Examiner: Gandy, James M.  
LREP Wolf, David  
CLMN Number of Claims: 1  
ECL Exemplary Claim: 1  
DRWN 5 Drawing Figure(s); 1 Drawing Page(s)  
LN.CNT 9

=> e zhou en min/au

E1	1	ZHOU EN JI/AU
E2	34	ZHOU EN LE/AU
E3	52 -->	ZHOU EN MIN/AU
E4	1	ZHOU EN MIN*/AU
E5	1	ZHOU EN XUAN/AU
E6	1	ZHOU ENBIAO/AU
E7	2	ZHOU ENCHAO/AU
E8	6	ZHOU ENCHEN/AU
E9	6	ZHOU ENHONG/AU
E10	3	ZHOU ENHUA/AU
E11	2	ZHOU ENHUI/AU
E12	1	ZHOU ENJE/AU

=> se3-e4 and mycoplasm?

SE3-E4 IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.  
For a list of commands available to you in the current file, enter  
"HELP COMMANDS" at an arrow prompt (=>).

=> s e3-e4 and mycoplasm?

L7 3 ("ZHOU EN MIN"/AU OR "ZHOU EN MIN\*/AU) AND MYCOPLASM?

=> dup rem l7

PROCESSING COMPLETED FOR L7

L8 3 DUP REM L7 (0 DUPLICATES REMOVED)

=> d bib ab 1-

YOU HAVE REQUESTED DATA FROM 3 ANSWERS - CONTINUE? Y/(N):y

L8 ANSWER 1 OF 3 USPATFULL on STN  
AN 2005:330188 USPATFULL  
TI **Mycoplasma** polypeptides  
IN Hsu, Walter H., 2725 Northridge Circle, Ames, IA, UNITED STATES 50014  
Young, Theresa F., Carlsbad, CA, UNITED STATES  
Ross, Richard F., Ames, IA, UNITED STATES  
Zhou, En-Min, Ames, IA, UNITED STATES  
PA Iowa State University Research Foundation, Inc., Ames, IA, UNITED  
STATES, 50011-2131 (U.S. corporation)  
PI US 2005287163 A1 20051229  
AI US 2003-509926 A1 20030404 (10)  
WO 2003-US10305 20030404  
20050729 PCT 371 date  
PRAI US 2003-370344P 20020405 (60)  
DT Utility  
FS APPLICATION  
LREP FISH & RICHARDSON P.C., PO BOX 1022, MINNEAPOLIS, MN, 55440-1022, US  
CLMN Number of Claims: 33  
ECL Exemplary Claim: 1  
DRWN 15 Drawing Page(s)  
LN.CNT 1268  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides methods and materials related to  
**mycoplasma**. For example, the invention provides  
**mycoplasma** polypeptides having the ability to increase calcium  
release from cells (e.g., porcine ciliated tracheal cells) as well as  
antibodies that bind to such **mycoplasma** polypeptides. In  
addition, the invention provides methods for identifying inhibitors of  
**mycoplasma**-induced calcium release from porcine ciliated  
tracheal cells.

L8 ANSWER 2 OF 3 MEDLINE on STN  
AN 2005062454 MEDLINE  
DN PubMed ID: 15690953  
TI Comparison of two swine **Mycoplasma hyopneumoniae** enzyme-linked  
immunosorbent assays for detection of antibodies from vaccinated pigs and  
field serum samples.  
AU Ameri-Mahabadi Mehrdad; Zhou En-Min; Hsu Walter H  
CS Veterinary Diagnostic Laboratory, Department of Veterinary Diagnostic and  
Production Animal Medicine, College of Veterinary Medicine, Iowa State  
University, Ames, IA 50011, USA.  
SO Journal of veterinary diagnostic investigation : official publication of  
the American Association of Veterinary Laboratory Diagnosticians, Inc,  
(2005 Jan) Vol. 17, No. 1, pp. 61-4.  
Journal code: 9011490. ISSN: 1040-6387.  
CY United States  
DT (EVALUATION STUDIES)  
Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 200502  
ED Entered STN: 20050205  
Last Updated on STN: 20050301  
Entered Medline: 20050225  
AB **Mycoplasma hyopneumoniae** (Mhyo) causes **mycoplasmal**  
pneumonia, an economically important disease of swine. Serodiagnosis of  
Mhyo is based on the current available commercial enzyme immunoassays for  
detection of swine antibodies against Mhyo, which are the indirect  
enzyme-linked immunosorbent assay (ELISA) and the blocking ELISA  
(B-ELISA). Because of the limited information available for these ELISAs,  
these 2 assays were compared by testing 347 serum samples collected from  
vaccinated pigs at 0, 13, 28, 43, and 62 days postimmunization (DPI), 50  
samples from nonvaccinated pigs, and 1,013 field serum samples. The  
results of comparison study showed that the specificity for both ELISAs  
was 99.2% generated from 139 non-vaccinated negative samples. The  
sensitivities for indirect ELISA generated from samples collected from  
animals that received the vaccine at DPI 13, 28, 43, and 62 were 0%,  
95.7%, 88.4%, and 92.6%, respectively, whereas the sensitivities for

B-ELISA were 0%, 98%, 100%, and 97%, respectively. The overall agreement of 96.7% and 80.3% was generated between 2 ELISAs from negative and vaccinated pigs and from field samples, respectively.

L8 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 2003:836908 CAPLUS  
DN 139:336910  
TI **Mycoplasma** hyopneumoniae polypeptides inducing calcium release  
from ciliated tracheal cells  
IN Hsu, Walter H.; Young, Theresa F.; Ross, Richard F.; Zhou, En-Min  
PA Iowa State University Research Foundation, Inc., USA  
SO PCT Int. Appl., 49 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003086473	A1	20031023	WO 2003-US10305	20030404
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2481042	AA	20031023	CA 2003-2481042	20030404
	AU 2003221791	A1	20031027	AU 2003-221791	20030404
	EP 1496945	A1	20050119	EP 2003-718191	20030404
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	CN 1658906	A	20050824	CN 2003-813128	20030404
	JP 2005535573	T2	20051124	JP 2003-583487	20030404
	US 2005287163	A1	20051229	US 2005-509926	20050729
PRAI	US 2002-370344P	P	20020405		
	WO 2003-US10305	W	20030404		

AB The authors disclose **mycoplasma** polypeptides having the ability to increase calcium release from cells (e.g., porcine ciliated tracheal cells) as well as antibodies that bind to such **mycoplasma** polypeptides. In addition, the invention provides methods for identifying inhibitors of **mycoplasma**-induced calcium release from porcine ciliated tracheal cells.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s mycoplasm? and (calcium release?)

L9 45 MYCOPLASM? AND (CALCIUM RELEASE?)

=> dup rem l9

PROCESSING COMPLETED FOR L9

L10 39 DUP REM L9 (6 DUPLICATES REMOVED)

=> d bib ab kwic 1-

YOU HAVE REQUESTED DATA FROM 39 ANSWERS - CONTINUE? Y/(N):y

L10 ANSWER 1 OF 39 USPATFULL on STN  
AN 2005:330188 USPATFULL  
TI **Mycoplasma** polypeptides  
IN Hsu, Walter H., 2725 Northridge Circle, Ames, IA, UNITED STATES 50014  
Young, Theresa F., Carlsbad, CA, UNITED STATES  
Ross, Richard F., Ames, IA, UNITED STATES  
Zhou, En-Min, Ames, IA, UNITED STATES  
PA Iowa State University Research Foundation, Inc., Ames, IA, UNITED STATES, 50011-2131 (U.S. corporation)  
PI US 2005287163 A1 20051229

AI US 2003-509926 A1 20030404 (10)  
WO 2003-US10305 20030404  
20050729 PCT 371 date  
PRAI US 2003-370344P 20020405 (60)  
DT Utility  
FS APPLICATION  
LREP FISH & RICHARDSON P.C., PO BOX 1022, MINNEAPOLIS, MN, 55440-1022, US  
CLMN Number of Claims: 33  
ECL Exemplary Claim: 1  
DRWN 15 Drawing Page(s)  
LN.CNT 1268

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides methods and materials related to **mycoplasma**. For example, the invention provides **mycoplasma** polypeptides having the ability to increase **calcium release** from cells (e.g., porcine ciliated tracheal cells) as well as antibodies that bind to such **mycoplasma** polypeptides. In addition, the invention provides methods for identifying inhibitors of **mycoplasma**-induced **calcium release** from porcine ciliated tracheal cells.

TI **Mycoplasma** polypeptides

AB The invention provides methods and materials related to **mycoplasma**. For example, the invention provides **mycoplasma** polypeptides having the ability to increase **calcium release** from cells (e.g., porcine ciliated tracheal cells) as well as antibodies that bind to such **mycoplasma** polypeptides. In addition, the invention provides methods for identifying inhibitors of **mycoplasma**-induced **calcium release** from porcine ciliated tracheal cells.

SUMM The invention relates to **mycoplasma** polypeptide preparations as well as antibody preparations having antibodies against **mycoplasma** polypeptides.

SUMM **Mycoplasmas** are a large group of diverse prokaryotic species comprising the class Mollicutes. **Mycoplasmas** lack a cell wall, have a remarkably small genome, are phylogenically related to gram-positive eubacteria, and are the smallest known. . . (1985); Razin, FEMS Microbiol. Lett., 79:423-432 (1992); and Razin and Jacobs, J. Gen. Microbiol., 138:407-422 (1992)). The surface of the **mycoplasmas** is clearly critical for the interaction of these organisms with their host cells (Freundt and Edward. 1979. Classification and taxonomy. p. 1-42. In M. F. Barile and S. Razin (eds.), The **Mycoplasmas**. Academic press, New York, N.Y.; Rogers et al., Proc. Natl. Acad. Sci. USA, 82:1160-1164 (1985); and Woese et al., J. . .

SUMM **Mycoplasma hyopneumoniae** (Mhyo) is the etiological agent of **mycoplasmal** pneumonia of swine, which continues to cause significant economic losses to swine producers. This organism is an extracellular pathogen, and. . . role of **M. hyopneumoniae** infection in association with other swine respiratory pathogens has gained increased importance (Ross, R F, 1999. **Mycoplasmal** diseases, p. 495-509. In B. E. Straw, S. D'Allaire, W. L. Mengeling, and D. J. Taylor (eds), Diseases of Swine.. .

SUMM . . . (1977); Zhang et al., Infect. Immun., 62:1616-1622 (1994); and Zhang et al., Infect. Immun., 63:1013-1019 (1995)). Thus, the adherence of **mycoplasma** to its host cells is an important initial step in the pathogenesis of **mycoplasmal** diseases. The adherence process is mainly mediated by receptor-ligand interactions (Zhang et al., Infect. Immun., 62:4367-4373 (1994); Zhang et al., . . .

SUMM The invention involves methods and materials related to **mycoplasma** polypeptide preparations having the ability to increase **calcium release** from porcine ciliated tracheal cells. Such polypeptide preparations can be used to generate polypeptide fragments having the ability to block **mycoplasma**-induced **calcium release** and can be used to generate antibodies having the ability to bind **mycoplasma** polypeptides. The invention also provides antibodies that bind to **mycoplasma** polypeptides. Such antibodies can be used to inhibit **mycoplasma**-induced **calcium release** and can be used to differentiate between pathogenic and non-pathogenic **mycoplasma**

In addition, the invention provides methods for identifying inhibitors of **mycoplasma**-induced **calcium release** from porcine ciliated tracheal cells. Such inhibitors can be used to protect swine from developing **mycoplasma** pneumonia and can be used to treat swine having **mycoplasma** pneumonia

SUMM In general, one aspect of the invention features a substantially pure polypeptide, where the polypeptide increases **calcium release** from porcine ciliated tracheal cells, and where the molecular weight of the polypeptide is between about 30 kDa and about 150 kDa. The polypeptide can be a **mycoplasma** polypeptide. The polypeptide can be obtained from pathogenic **Mycoplasma hyopneumoniae**. The polypeptide can be about 80 percent pure or about 90 percent pure. The molecular weight of the polypeptide. . .

SUMM In another aspect, the invention features a substantially pure antibody capable of binding a polypeptide, where the polypeptide increases **calcium release** from porcine ciliated tracheal cells, and where the molecular weight of the polypeptide is between about 30 kDa and about. . . antibody. The antibody can be a mouse antibody. The polypeptide can be a tryptic fragment. The polypeptide can be a **mycoplasma** polypeptide. The polypeptide can be obtained from pathogenic **Mycoplasma hyopneumoniae**. The antibody can be about 80 percent pure or about 90 percent pure.

SUMM . . . the invention features a method for inducing an immune response in a mammal, where the immune response is against a **mycoplasma** polypeptide. The method includes administering a substantially pure **mycoplasma** polypeptide to the mammal under conditions wherein the mammal produces antibodies against the polypeptide, where the polypeptide increases **calcium release** from porcine ciliated tracheal cells, and wherein the molecular weight of the polypeptide is between about 30 kDa and about.

SUMM Another aspect of the invention features a method for binding an antibody to a polypeptide, where the polypeptide increases **calcium release** from porcine ciliated tracheal cells, and wherein the molecular weight of the polypeptide is between about 30 kDa and about. . . polypeptide. The antibody can be a monoclonal antibody. The antibody can be a mouse antibody. The polypeptide can be a **mycoplasma** polypeptide.

SUMM Another aspect of the invention features a method for identifying an inhibitor of **mycoplasma** induced **calcium release** from porcine ciliated tracheal cells. The method includes (a) contacting cells (e.g., porcine ciliated tracheal cells) with a **mycoplasma** polypeptide and a test compound, where the polypeptide increases **calcium release** from porcine ciliated tracheal cells, and wherein the molecular weight of the polypeptide is between about 30 kDa and about 150 kDa, and (b) determining whether the test compound inhibits the cells from releasing calcium, where inhibition of **calcium release** from the cells by the test compound indicates that the test compound is the inhibitor. The test compound can be. . .

SUMM In another embodiment, the invention features a method for identifying an inhibitor of **calcium release** from cells (e.g., porcine ciliated tracheal cells) induced by a **mycoplasma** polypeptide, where the polypeptide increases **calcium release** from porcine ciliated tracheal cells, and where the molecular weight of the polypeptide is between about 30 kDa and about 150 kDa. The method includes (a) contacting cells (e.g., porcine ciliated tracheal cells) with a **mycoplasma** polypeptide pretreated with a test compound, and (b) determining whether the test compound inhibits the cells from releasing calcium, where inhibition of **calcium release** from the cells by the test compound indicates that the test compound is the inhibitor. The test compound can be. . .

DRWD . . . total of 18 cells), and (c) *M. flocculare* (n=8, a total of 24 cells). The protein concentration for all three **mycoplasma** preparations was 300 µg/mL. The arrow indicates when the **mycoplasma** was administered.

DRWD . . . seconds, and (d) U-73343 (2 µM; n=5 cells) on *M. hyopneumoniae*-induced increase in [Ca<sub>sup</sub>.2+]<sub>sub.i</sub>. The arrow indicates

when the intact **mycoplasma** (300 µg/mL) was administered.

DETD The invention provides methods and materials related to **mycoplasma**. For example, the invention provides **mycoplasma** polypeptides having the ability to increase **calcium release** from porcine ciliated tracheal cells as well as antibodies that bind to such **mycoplasma** polypeptides. In addition, the invention provides methods for identifying inhibitors of **mycoplasma**-induced **calcium release** from porcine ciliated tracheal cells.

DETD . . . phosphorylation or glycosylation). The polypeptides provided herein can be any size. For example, a polypeptide having the ability to increase **calcium release** from porcine ciliated tracheal cells can be 10, 25, 50, 75, 100, 125, 150, 175, 200, or more amino acids in length. In addition, a polypeptide having the ability to increase **calcium release** from porcine ciliated tracheal cells can have a molecular weight that is between about 10 kDa and about 150 kDa. For example, a polypeptide having the ability to increase **calcium release** from porcine ciliated tracheal cells can have a molecular weight of about 10, 20, 30, 40, 50, 60, 65, 70, . . . 80, 85, 90, 95, 100, 105, 110, 115, or 120 kDa. In addition, a polypeptide having the ability to increase **calcium release** from cells (e.g., porcine ciliated tracheal cells) can be a tryptic fragment. In such cases, the molecular weight of the . . . or 80 kDa. In some embodiments, the polypeptide (e.g., full length polypeptide or tryptic fragment) having the ability to increase **calcium release** from cells (e.g., porcine ciliated tracheal cells) can be from a pathogenic Mhyo strain (e.g., pathogenic M. hyopneumoniae strain 91-3).

DETD The polypeptides described herein can be obtained using any method. For example, a polypeptide having the ability to increase **calcium release** from cells can be obtained by extraction from a natural source (e.g., from Mhyo cells), by expression of a recombinant. . .

DETD Any method can be used to determine whether a particular polypeptide increases **calcium release** from cells. For example, the techniques described herein can be used to measure **calcium release** from porcine ciliated tracheal cells.

DETD In addition, the invention provides methods and materials that can be used to identify compounds that inhibit **mycoplasma**-induced **calcium release** (e.g., **calcium release** induced by Mhyo polypeptides) from cells (e.g., porcine ciliated tracheal cells). A method of identifying an inhibitor of **mycoplasma**-induced **calcium release** from cells can involve incubating cells (e.g., porcine ciliated tracheal cells) with a preparation containing a **mycoplasma** polypeptide (e.g., a Mhyo polypeptide from pathogenic Mhyo) in the presence of a test compound, and determining whether the test compound inhibits the cells from releasing calcium. In another embodiment, a method for identifying an inhibitor of **calcium release** can involve contacting cells with a **mycoplasma** polypeptide preparation pretreated with a test compound, and determining whether the test compound inhibits the cells from releasing calcium. **Calcium release** can be measured using any of the methods described herein. The preparation can be a crude Mhyo membrane polypeptide preparation, . . . or a tryptic digest of a Mhyo membrane polypeptide preparation. A test compound can be identified as an inhibitor of **mycoplasma**-induced **calcium release** if the increase in **calcium release** induced by the preparation containing the **mycoplasma** polypeptide is reduced in the presence of the compound as compared to in the absence of the compound. By "reduced" is meant that the occurrence of **calcium release** is lower (e.g., 5%, 10%, 25%, 50%, 75%, or 100% lower) in the presence of the test compound than in. . .

DETD **Mycoplasma Hyopneumoniae Increases Intracellular Calcium Release in Porcine Ciliated Tracheal Cells**

DETD The effects of intact pathogenic **Mycoplasma hyopneumoniae**, nonpathogenic M. hyopneumoniae, and M. flocculare on intracellular free Ca.sup.2+ concentrations ([Ca.sup.2+].sub.i) in porcine ciliated tracheal epithelial cells were. . .

DETD The following intact **mycoplasmas** were used herein: (1) a

pathogenic *M. hyopneumoniae* strain 91-3, originally cloned from strain 232, which exhibits high adherence to. . . Ross, *Ant. J. Vet. Res.*, 54:1262-1269 (1993)); and *M. flocculare* strain Ms42 (ATCC strain 27399), which is nonpathogenic in swine. **Mycoplasmas** were cultured in Friis medium (Friis, *Nord. Vet. Med.*, 27:337-339 (1975)) to logarithmic phase and harvested by centrifugation at 15,000+ g for 30 minutes. Following centrifugation, the **mycoplasma** pellets were collected and washed three times with 50 mL of PBS by centrifugation at 15,000+ g for 15 minutes. The final pellets were dispersed through a 27-gauge needle in PBS. The number of **mycoplasma** whole cells collected from 200 mL of culture ( $3.4 \pm 1.7 \times 10^{11}$  CCU, n=7) was determined as color changing units (CCU) using serial. . . as previously described (Zhang et al., *Infect. Immun.*, 62:4367-4373 (1994) and Zhang et al., *Infect. Immun.*, 63:1013-1019 (1995)). The final **mycoplasma** concentration was adjusted to 3 mg protein/mL in PBS.

DETD . . . recorded, and processed using the Attofluor digital fluorescence imaging system (Atto Instruments, Rockville, Md.). After reading fluorescence for 150 seconds, **mycoplasmas** were mixed with the cell system.  $[Ca^{sup.2+}]_{sub.i}$  was calculated as previously described (Grynkiewicz et al., *J. Biol. Chem.*, 260:3440-3450 (1985))..

DETD . . . 300 µg/mL. One to five ciliated single tracheal cells in each experiment were selected to investigate the  $[Ca^{sup.2+}]_{sub.i}$  changes. The **mycoplasmas** were maintained on ice before being applied to tracheal cells.

DETD . . . Cells were pretreated with thapsigargin (TG, 1 µM) for 30 minutes at 37° C. prior to the addition of the **mycoplasmas** to deplete the ER  $Ca^{sup.2+}$  store (Thastrup et al., *Proc. Natl. Acad. Sci. USA*, 87:2466-2470 (1990)). Cells were pretreated with. . . Neuroprotocols, 3:125-133 (1993)) or its inactive analogue U-73343 for 100 seconds at 37° C. prior to the addition of the **mycoplasmas**. To confirm that **mycoplasmas** increased  $[Ca^{sup.2+}]_{sub.i}$  by activating a  $G_{sub.i/o}$  protein, Mas 7 (10 µM), an activator of this protein (Higashijima et al., *J.* . . .

DETD Effects of **Mycoplasmas** on  $[Ca^{sup.2+}]_{sub.i}$  in Porcine Ciliated Tracheal Epithelial Cells

DETD . . . (18 cells in 6 experiments) and *M. flocculare* (24 cells in 8 experiments) did not increase  $[Ca^{sup.2+}]_{sub.i}$  at the same **mycoplasma** concentration (300 µg/mL) (FIG. 1).

DETD Since *M. hyopneumoniae* strain 91-3 might increase  $[Ca^{sup.2+}]_{sub.i}$  in ciliated cells via its secretory product, supernatants were collected from the **mycoplasma** (300 µg/mL) following the centrifugation at 15,000+ g for 15 minutes to test its ability in increasing  $[Ca^{sup.2+}]_{sub.i}$ . These supernatants. . .

DETD . . . U-73122, a specific PLC inhibitor (Bleasdale and Fisher, *Neuroprotocols*, 3:125-133 (1993)), before inoculation with *M. hyopneumoniae* strain 91-3 abolished the **mycoplasma**-induced  $[Ca^{sup.2+}]_{sub.i}$  increase in the ciliated cells (FIG. 3c). In contrast, U-73343, an inactive analogue of U-73122, did not prevent the  $[Ca^{sup.2+}]_{sub.i}$  response to the **mycoplasma** (basal:  $90 \pm 12$  nM, peak:  $330 \pm 25$  nM, 10 cells in 4 experiments; 82 percent of cells responded) (FIG. 3d). These findings. . .

DETD . . . (Zhang et al., *Infect. Immun.*, 63:1013-1019 (1995)). The  $[Ca^{sup.2+}]_{sub.i}$  response was a rapid event, and the increase was dependent on **mycoplasma** concentration. In another study of  $[Ca^{sup.2+}]_{sub.i}$  increase by *M. hyopneumoniae* in neutrophils,  $10^{sup.7-10}$  CCU of the pathogenic strain enhanced zymosan-induced. . . ( $10^{sup.9}$  CCU) to the cilia of respiratory epithelia results in tangling, clumping, and longitudinal splitting within 90 minutes of the **mycoplasma** administration, whereas nonpathogenic *M. hyopneumoniae* strain does not show ciliary damages (Debey et al., *Am. J. Vet. Res.*, 53:1705-1710 (1992)). . .

DETD . . . cells in response to *M. hyopneumoniae* varied from cell to cell, but in general, it increased with increasing concentration of **mycoplasma**. This heterogeneity of  $Ca^{sup.2+}$  response in the airway epithelial cells was similar to the effect of extracellular ATP reported in. . .

DETD . . . release from intracellular stores. Pretreatment of tracheal cells with TG to deplete ER  $Ca^{sup.2+}$  store abolished the effect of the

**mycoplasma**, confirming the involvement of this organelle in the Ca.sup.2+ release. Pretreatment of tracheal cells with U-73122, a specific PLC inhibitor, also prevented the **mycoplasma**-induced [Ca.sup.2+].sub.i increase, indicating that the **mycoplasma**-induced Ca.sup.2+ release from the ER is via a PLC pathway.

DETD . . . (Salathe and Bookman, J. Physiol. (Lond.), 520:851-865 (1999)), and support the involvement of changes in [Ca.sup.1+].sub.i in the pathogenesis of **mycoplasma**.

DETD **Mycoplasmas** lack cell walls and have only one type of membrane, the plasma membrane (Razin S. (1993) **Mycoplasma** membranes as models in membrane research (Chapter 2), In: Subcellular Biochemistry. Vol 20: **Mycoplasma** Cell Membranes, edited by Rottem S, Kahane I. Plenum Press, New York. pp. 1-28). The Mhyo membrane was prepared by. . . The trypsinization of the membrane can yield polypeptide fragments containing more epitopes for the receptors. The tryptic fragments of the **mycoplasma** were subjected to ultracentrifugation (100,000+ g, 60 minutes). The resulting supernatant, which contains soluble polypeptides, also increased [Ca.sup.2+].sub.i in ciliated. . .

DETD The virulent Mhyo strain 91-3 is grown in Friis medium supplemented with 20% **mycoplasma**-free swine serum and harvested by centrifugation as previously described (Zhang et al., Infect Immun 62:1616-1622 (1994)). The organisms are subjected. . . membrane preparation as previously described (Pollack J D. (1998) Enzyme analysis (Chapter 10), In: Methods in Molecular Biology. Vol. 104: **Mycoplasma** Protocols, edited by Miles R & Nicholas A. Humana Press, Totowa, N.J. pp. 79-93). The membrane preparation is suspended in. . .

DETD . . . polypeptide (or fragments thereof) is obtained using methods similar to those described elsewhere (Hsu and Minion, Infect. Immun., 66:4762-4766 (1998)). **Mycoplasmas** use UGA, which is normally a stop codon, as a tryptophan coding codon. Thus, suppressor systems are used for expression of most **mycoplasma** gene sequences in E. coli. Alternatively, site directed mutagenesis is used to modify the UGA codons.

DETD . . . (for the determination of cilia loss). After incubation, the inserts are washed with PBS three times to remove the unattached **mycoplasmas**. Cells are dissociated from the insert using trypsin-EDTA and washed with PBS. These cells are fixed in situ with glutaraldehyde. . . analysis to obtain data for the areas occupied by cilia (for the determination of cilia loss) and the attachment of **mycoplasma** to the cilium.

DETD . . . deletion mutagenesis and/or overlapping peptide sequences. In addition, Mhyo polypeptide preparations are used to vaccinate swine to help control swine **mycoplasmal** pneumonia, and/or analogs of the peptide sequences corresponding to the active site are used to block the cell's receptors for. . .

DETD Antibodies at different dilutions are added to the **mycoplasma** membrane preparation or to the purified Mhyo polypeptide prior to inclusion in the [Ca.sup.2+].sub.i determinations. The antibodies also are added. . .

CLM What is claimed is:

1. A substantially pure polypeptide, wherein said polypeptide increases **calcium release** from porcine ciliated tracheal cells, and wherein the molecular weight of said polypeptide is between about 30 kDa and about. . .

2. The polypeptide of claim 1, wherein said polypeptide is a **mycoplasma** polypeptide.

3. The polypeptide of claim 1, wherein said polypeptide is obtained from pathogenic **Mycoplasma hyopneumoniae**.

14. A substantially pure antibody capable of binding a polypeptide, wherein said polypeptide increases **calcium release** from porcine ciliated tracheal cells, and wherein the molecular weight of said polypeptide is between about 30 kDa and about. . .

18. The antibody of claim 14, wherein said polypeptide is a **mycoplasma** polypeptide.



19. The antibody of claim 14, wherein said polypeptide is obtained from pathogenic **Mycoplasma hyopneumoniae**.

22. A method for inducing an immune response in a mammal, wherein said immune response is against a **mycoplasma** polypeptide, said method comprising administering a substantially pure **mycoplasma** polypeptide to said mammal under conditions wherein said mammal produces antibodies against said polypeptide, wherein said polypeptide increases **calcium release** from porcine ciliated tracheal cells, and wherein the molecular weight of said polypeptide is between about 30 kDa and about . . .

24. A method for binding an antibody to a polypeptide, wherein said polypeptide increases **calcium release** from porcine ciliated tracheal cells, and wherein the molecular weight of said polypeptide is between about 30 kDa and about . . .

27. The method of claim 24, wherein said polypeptide is a **mycoplasma** polypeptide.

28. A method for identifying an inhibitor of **mycoplasma** induced **calcium release** from cells, said method comprising: a) contacting cells with a **mycoplasma** polypeptide and a test compound, wherein said polypeptide increases **calcium release** from porcine ciliated tracheal cells, and wherein the molecular weight of said polypeptide is between about 30 kDa and about 150 kDa, b) determining whether said test compound inhibits said cells from releasing calcium, wherein inhibition of **calcium release** from said cells by said test compound indicates that said test compound is said inhibitor.

31. A method for identifying an inhibitor of **calcium release** from cells induced by a **mycoplasma** polypeptide, wherein said polypeptide increases **calcium release** from porcine ciliated tracheal cells, and wherein the molecular weight of said polypeptide is between about 30 kDa and about 150 kDa, said method comprising: a) contacting cells with a **mycoplasma** polypeptide pretreated with a test compound, and b) determining whether said test compound inhibits said cells from releasing calcium, wherein inhibition of **calcium release** from said cells by said test compound indicates that said test compound is said inhibitor.

L10 ANSWER 2 OF 39 USPATFULL on STN  
AN 2005:261216 USPATFULL  
TI Polynucleotide encoding a novel human G-protein coupled receptor variant of HM74, HGPRBMY74  
IN Ramanathan, Chandra S., Wallingford, CT, UNITED STATES  
Feder, John N., Belle Mead, NJ, UNITED STATES  
PI US 2005227238 A1 20051013  
AI US 2004-800249 A1 20040312 (10)  
PRAI US 2003-454942P 20030314 (60)  
DT Utility  
FS APPLICATION  
LREP STEPHEN B. DAVIS, BRISTOL-MYERS SQUIBB COMPANY, PATENT DEPARTMENT, P O BOX 4000, PRINCETON, NJ, 08543-4000, US  
CLMN Number of Claims: 20  
ECL Exemplary Claim: 1  
DRWN 7 Drawing Page(s)  
LN.CNT 13234  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The present invention provides novel polynucleotides encoding HGPRBMY74 polypeptides, fragments and homologues thereof. Also provided are vectors, host cells, antibodies, and recombinant and synthetic methods for producing said polypeptides. The invention further relates to diagnostic and therapeutic methods for applying these novel HGPRBMY74 polypeptides to the diagnosis, treatment, and/or prevention of various diseases and/or disorders related to these polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of the polynucleotides and polypeptides of the present

invention.

DETD . . . of the present invention is a functional nicotonic acid receptor, the inventors have demonstrated that HGPRBMY74 is capable of eliciting **calcium release** in response to nicotinic acid exposure as shown in FIG. 5 and 6. Stable mammalian cell lines containing HGPRBMY74 and.

DETD . . . that HGPRBMY74 responds in a dose-dependent manner to nicotinic acid exposure. The response seen in the FLIPR assay, measuring intracellular **calcium release**, is quite similar to the response observed in cells expressing the human HM74a sequence (also known as the high affinity.

DETD . . . and Enterohemorrhagic E. coli), Enterobacteriaceae (Klebsiella, Salmonella (e.g., Salmonella typhi, and Salmonella paratyphi), Serratia, Yersinia), Erysipelothrix, Helicobacter, Legionellosis, Leptospirosis, Listeria, **Mycoplasmatales**, Mycobacterium leprae, Vibrio cholerae, Neisseriaceae (e.g., Acinetobacter, Gonorrhea, Meningococcal), Meisseria meningitidis, Pasteurellacea Infections (e.g., Actinobacillus, Heamophilus (e.g., Heamophilus influenza type.

L10 ANSWER 3 OF 39 USPATFULL on STN

AN 2005:118308 USPATFULL

TI Therapeutic treatment methods 2

IN Reading, Christopher L., San Diego, CA, UNITED STATES  
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 Frincke, James M., San Diego, CA, UNITED STATES  
 Li, Mei, San Diego, CA, UNITED STATES  
 Page, Theodore M., Carlsbad, CA, UNITED STATES  
 Stickney, Dwight R., Granite Bay, CA, UNITED STATES  
 Trauger, Richard J., Leucadia, CA, UNITED STATES  
 White, Steven K., San Diego, CA, UNITED STATES

PI US 2005101581 A1 20050512

AI US 2003-728400 A1 20031205 (10)

RLI Continuation-in-part of Ser. No. US 2003-651515, filed on 28 Aug 2003, PENDING

PRAI US 2002-407146P 20020828 (60)  
 US 2002-408332P 20020904 (60)  
 US 2003-479257P 20030617 (60)

DT Utility

FS APPLICATION

LREP HOLLIS-EDEN PHARMACEUTICALS, INC., 4435 EASTGATE MALL, SUITE 400, SAN DIEGO, CA, 92121, US

CLMN Number of Claims: 37

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 18638

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to the use of compounds to ameliorate or treat a condition such as a cystic fibrosis, neutropenia or other exemplified conditions. Exemplary compounds that can be used include 3 $\beta$ -hydroxy-17 $\beta$ -aminoandrost-5-ene, 3 $\beta$ -hydroxy-16 $\alpha$ -fluoro-17 $\beta$ -aminoandrost-5-ene, 3 $\alpha$ -hydroxy-16 $\alpha$ -fluoro-17 $\beta$ -aminoandrost-5-ene, 3 $\beta$ -hydroxy-16 $\beta$ -fluoro-17 $\beta$ -aminoandrost-5-ene, 1 $\alpha$ ,3 $\beta$ -dihydroxy-4 $\alpha$ -fluoroandrost-5-ene-17-one, 1 $\alpha$ ,3 $\beta$ ,17 $\beta$ -trihydroxy-4 $\alpha$ -fluoroandrost-5-ene, 1 $\beta$ ,3 $\beta$ -dihydroxy-6 $\alpha$ -bromoandrost-5-ene, 1 $\alpha$ -fluoro-3 $\beta$ ,12 $\alpha$ -dihydroxyandrost-5-ene-17-one, 1 $\alpha$ -fluoro-3 $\beta$ ,4 $\alpha$ -dihydroxyandrost-5-ene and 4 $\alpha$ -fluoro-3 $\beta$ ,6 $\alpha$ ,17 $\beta$ -trihydroxyandrostane.

DETD . . . Morganella sp. (e.g., M. morganii), Mycobacterium sp. (e.g., M. avium, M. bovis, M. leprae, M. tuberculosis, M. pneumoniae. M. penetrans), **Mycoplasma** sp. (e.g., M. fermentans, M. penetrans, M. pneumoniae), Neisseria (e.g., N. gonorrhoeae, N. meningitidis), Nocardia asteroides, Proteus sp. (e.g., P. . . .

DETD . . . be treated, prevented or ameliorated thus include infections by intracellular or extracellular gram positive bacteria, gram-negative bacteria, acid fast bacteria, **Mycoplasma** or rickettsial

infections (e.g., a rickettsial spotted fever infection or a rickettsial typhus or scrub typhus infection). Other pathogens that. . .

DETD . . . modulation effects of the F1Cs on cells or tissues include (1) inhibition of one or more of bone resorption or **calcium release** or gp80, gp130, tumor necrosis factor (TNF), osteoclast differentiation factor (RANKUODF), RANKUODF receptor, IL-6 or IL-6 receptor expression or biological. . .

DETD . . . Fresh blood (Rh+) is used to isolate erythrocytes (RBC). Washed RBC are infected with schizont/trophozoite parasite stages (Palo Alto strain, **mycoplasma**-free). Stage specific parasites are isolated by the Percoll-mannitol method. Briefly, normal schizont-stage parasitized RBC (SPE) separated on Percoll-mannitol gradient (parasitemia. . .

L10 ANSWER 4 OF 39 USPATFULL on STN

AN 2005:112372 USPATFULL

TI Full-length human cDNAs encoding potentially secreted proteins

IN Dumas Milne Edwards, Jean-Baptiste, Paris, FRANCE  
Bougueleret, Lydie, Petit Lancy, SWITZERLAND  
Jobert, Severin, Paris, FRANCE

PI US 2005096458 A1 20050505

AI US 2003-643836 A1 20030819 (10)

RLI Division of Ser. No. US 2000-731872, filed on 7 Dec 2000, ABANDONED

PRAI US 1999-169629P 19991208 (60)  
US 2000-187470P 20000306 (60)

DT Utility

FS APPLICATION

LREP SALIWANCHIK LLOYD & SALIWANCHIK, A PROFESSIONAL ASSOCIATION, PO BOX 142950, GAINESVILLE, FL, 32614-2950, US

CLMN Number of Claims: 16

ECL Exemplary Claim: 1

DRWN 5 Drawing Page(s)

LN.CNT 28075

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention concerns GENSET polynucleotides and polypeptides. Such GENSET products may be used as reagents in forensic analyses, as chromosome markers, as tissue/cell/organelle-specific markers, in the production of expression vectors. In addition, they may be used in screening and diagnosis assays for abnormal GENSET expression and/or biological activity and for screening compounds that may be used in the treatment of GENSET-related disorders.

DETD . . . calmodulin, immunophilins (FK506 binding proteins), and in skeletal muscle the dihydropyridine receptor. The RyR from skeletal muscle is the major **calcium release** channel for that tissue, and the most intensively studied of the three genetic isoforms detected thus far in mammalian species.. . .

DETD . . . gram-negative enterobacterium including shigella, salmonella, and campylobacter, pseudomonas, vibrio, brucella, francisella, yersinia, bartonella, norcardium, actinomyces, mycobacterium, spirochaetale, rickettsia, chlamydia, and **mycoplasma**; infections by fungal agents classified as aspergillus, blastomyces, dermatophytes, cryptococcus, coccidioides, malassezia, histoplasma, and other fungal agents causing various mycoses;. . .

L10 ANSWER 5 OF 39 USPATFULL on STN

AN 2005:111533 USPATFULL

TI 70 human secreted proteins

IN Ruben, Steven M., Brookeville, MD, UNITED STATES  
Young, Paul E., Gaithersburg, MD, UNITED STATES  
Brewer, Laurie A., St. Paul, MN, UNITED STATES  
Ebner, Reinhard, Gaithersburg, MD, UNITED STATES  
Olsen, Henrik S., Gaithersburg, MD, UNITED STATES  
Florence, Kimberly A., Rockville, MD, UNITED STATES  
Rosen, Craig A., Laytonsville, MD, UNITED STATES  
Duan, Roxanne D., Gaithersburg, MD, UNITED STATES  
Moore, Paul A., North Bethesda, MD, UNITED STATES  
Shi, Yanggu, Gaithersburg, MD, UNITED STATES  
LaFleur, David W., Washington, DC, UNITED STATES  
Florence, Charles, Rockville, MD, UNITED STATES

Soppet, Daniel R., Centreville, VA, UNITED STATES  
Endress, Gregory A., Florence, MA, UNITED STATES  
Feng, Ping, Germantown, MD, UNITED STATES  
Komatsoulis, George A., Silver Spring, MD, UNITED STATES  
PA Human Genome Sciences, Inc., Rockville, MD, UNITED STATES (U.S.  
corporation)  
PI US 2005095612 A1 20050505  
AI US 2004-866831 A1 20040615 (10)  
RLI Division of Ser. No. US 2002-144929, filed on 15 May 2002, PENDING  
Continuation of Ser. No. US 2000-716128, filed on 17 Nov 2000, ABANDONED  
Continuation of Ser. No. US 1999-251329, filed on 17 Feb 1999, ABANDONED  
Continuation-in-part of Ser. No. WO 1998-US17044, filed on 18 Aug 1998,  
PENDING  
PRAI US 1997-56369P 19970819 (60)  
US 1997-56535P 19970819 (60)  
US 1997-56556P 19970819 (60)  
US 1997-56555P 19970819 (60)  
US 1997-56726P 19970819 (60)  
US 1997-56368P 19970819 (60)  
US 1997-56728P 19970819 (60)  
US 1997-56628P 19970819 (60)  
US 1997-56629P 19970819 (60)  
US 1998-89510P 19980616 (60)  
US 1998-92956P 19980715 (60)  
DT Utility  
FS APPLICATION  
LREP HUMAN GENOME SCIENCES INC, INTELLECTUAL PROPERTY DEPT., 14200 SHADY  
GROVE ROAD, ROCKVILLE, MD, 20850, US  
CLMN Number of Claims: 24  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 12243  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The present invention relates to novel human secreted proteins and  
isolated nucleic acids containing the coding regions of the genes  
encoding such proteins. Also provided are vectors, host cells,  
antibodies, and recombinant methods for producing human secreted  
proteins. The invention further relates to diagnostic and therapeutic  
methods useful for diagnosing and treating disorders related to these  
novel human secreted proteins.  
DETD . . . activated Calcium permeability. Thus, it is likely that this  
gene activates signal transduction pathways in myelogenous leukemia  
cells through intracellular **calcium release**. Binding  
of a ligand to a receptor is known to alter intracellular levels of  
small molecules, such as calcium, potassium, . . .  
DETD . . . and/or treatment of allergies caused by Cladosporium herbarum.  
Similarly, the tissue distribution in white blood cells, combined with  
the observed **calcium release** activity in myelogenous  
leukemia cells, indicates that polynucleotides and polypeptides  
corresponding to this gene are useful for the diagnosis and/or. . .  
DETD . . . Bacteroidaceae, Blastomycosis, Bordetella, Borrelia,  
Brucellosis, Candidiasis, Campylobacter, Coccidioidomycosis,  
Cryptococcosis, Dermatocycoses, Enterobacteriaceae (Klebsiella,  
Salmonella, Serratia, Yersinia), Erysipelothrix, Helicobacter,  
Legionellosis, Leptospirosis, Listeria, **Mycoplasmatales**,  
Neisseriaceae (e.g., Acinetobacter, Gonorrhea, Menigococcal),  
Pasteurellaceae Infections (e.g., Actinobacillus, Heamophilus,  
Pasteurella), Pseudomonas, Rickettsiaceae, Chlamydiaceae, Syphilis, and  
Staphylococcal. These bacterial or. . .  
L10 ANSWER 6 OF 39 USPATFULL on STN  
AN 2005:236070 USPATFULL  
TI Albumin fusion proteins  
IN Rosen, Craig A., Laytonsville, MD, UNITED STATES  
Haseltine, William A., Washington, DC, UNITED STATES  
PA Human Genome Sciences, Inc., Rockville, MD, UNITED STATES (U.S.  
corporation)  
PI US 6946134 B1 20050920  
AI US 2001-833111 20010412 (9)

PRAI US 2000-256931P 20001221 (60)  
US 2000-199384P 20000425 (60)  
US 2000-229358P 20000412 (60).  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Carlson, Karen Cochrane; Assistant Examiner: Robinson,  
Hope A.  
LREP Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P.  
CLMN Number of Claims: 25  
ECL Exemplary Claim: 1  
DRWN 21 Drawing Figure(s); 20 Drawing Page(s)  
LN.CNT 23429

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention encompasses albumin fusion proteins. Nucleic acid molecules encoding the albumin fusion proteins of the invention are also encompassed by the invention, as are vectors containing these nucleic acids, host cells transformed with these nucleic acids vectors, and methods of making the albumin fusion proteins of the invention and using these nucleic acids, vectors, and/or host cells. Additionally the present invention encompasses pharmaceutical compositions comprising albumin fusion proteins and methods of treating, preventing, or ameliorating diseases, disorders or conditions using albumin fusion proteins of the invention.

DETD . . . immunologic disorders,  
cancer

B24085 and  
release, as well as an increased increase can be assayed by  
methods  
B24086  
amount of calcium release by well-known in  
the art, for example,  
smooth muscle cells.

Pavan et al., AM J Obstet Gynecol  
2000 Jul; 183(1):. . .

DETD . . . Cryptococcus neoformans; aspergillosis, caused by Aspergillus spp.; candidiasis, caused by Candida; and mucormycosis)), Pneumocystis carinii (pneumocystis pneumonia), atypical pneumonias (e.g., Mycoplasma and Chlamydia spp.), opportunistic infection pneumonia, nosocomial pneumonia, chemical pneumonitis, and aspiration pneumonia, pleural disorders (e.g., pleurisy, pleural effusion, and. . .

DETD . . . urethra, including inflammatory disorders, such as balanoposthitis, balanitis xerotica obliterans, phimosis, paraphimosis, syphilis, herpes simplex virus, gonorrhea, non-gonococcal urethritis, chlamydia, mycoplasma, trichomonas, HIV, AIDS, Reiter's syndrome, condyloma acuminatum, condyloma latum, and pearly penile papules urethral abnormalities, such as hypospadias, epispadias, and. . .

DETD . . . Serratia, Yersinia, Shigella), Erysipelothrix, Haemophilus (e.g., Haemophilus influenza type B), Helicobacter, Legionella (e.g., Legionella pneumophila), Leptospiral Listeria (e.g., Listeria monocytogenes), Mycoplasma, Mycobacterium (e.g., Mycobacterium leprae and Mycobacterium tuberculosis), Vibrio (e.g., Vibrio cholerae), Neisseriaceae (e.g., Neisseria gonorrhea, Neisseria meningitidis), Pasteurellaceae, Proteus, Pseudomonas. . .

L10 ANSWER 7 OF 39 USPATFULL on STN

AN 2004:320977 USPATFULL

TI Method for identifying substances which positively influence inflammatory conditions of chronic inflammatory airway diseases

IN Jung, Birgit, Schwabenheim, GERMANY, FEDERAL REPUBLIC OF  
Kraut, Norbert, Eberhardzell, GERMANY, FEDERAL REPUBLIC OF  
Mueller, Stefan, Mainz, GERMANY, FEDERAL REPUBLIC OF  
Kistler, Barbara, Pfungstadt, GERMANY, FEDERAL REPUBLIC OF  
Seither, Peter, Rissege Halde, GERMANY, FEDERAL REPUBLIC OF  
Quast, Karsten, Schemmerberg, GERMANY, FEDERAL REPUBLIC OF  
Weith, Andreas, Eberhardzell, GERMANY, FEDERAL REPUBLIC OF

PA Boehringer Ingelheim Pharma KG, Ingelheim, GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation)

PI US 2004253630 A1 20041216

AI US 2004-874015 A1 20040622 (10)  
 RLI Division of Ser. No. US 2001-944807, filed on 31 Aug 2001, GRANTED, Pat.  
 No. US 6773895  
 PRAI GB 2001-21484 20010901  
 US 2000-233748P 20000919 (60)  
 DT Utility  
 FS APPLICATION  
 LREP BOEHRINGER INGELHEIM CORPORATION, 900 RIDGEBURY ROAD, P. O. BOX 368,  
 RIDGEFIELD, CT, 06877  
 CLMN Number of Claims: 54  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 2264  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB The present invention relates to substances which modulate receptors  
 involved in inflammatory processes and whose modulated functions  
 positively influence inflammatory diseases.  
 DETD . . . are synthesized by 15-lipoxygenase (Kim, S. J., 1988, Biochem.  
 Biophys Res. Commun. 150:870-876). Lipoxin A.sub.4 (LXA.sub.4)  
 stimulates chemotaxis, adherence and **calcium release**  
 in monocytes. In neutrophils, though, LXA.sub.4 inhibits chemotaxis and  
 adhesion, and downregulates transmigration through epithelial cells  
 (Maddox, J. F. and. . .  
 DETD . . . plates. Cells are maintained in a humidified atmosphere with 5%  
 CO.sub.2 at 37° C. and tested regularly for contamination by  
**mycoplasma**.  
 DETD . . . All cells are maintained in a humidified atmosphere with 5%  
 CO.sub.2 at 37° C. and tested regularly for contamination by  
**mycoplasma**.  
 L10 ANSWER 8 OF 39 USPATFULL on STN  
 AN 2004:292231 USPATFULL  
 TI Polynucleotides encoding novel variants of the TRP channel family  
 member, LTRPC3  
 IN Lee, Ning, Belle Mead, NJ, UNITED STATES  
 Chen, Jian, Princeton, NJ, UNITED STATES  
 Feder, John N., Belle Mead, NJ, UNITED STATES  
 Wu, Shujian, Langhorne, PA, UNITED STATES  
 Blonar, Michael A., Malvern, PA, UNITED STATES  
 Bol, David K., Gaithersburg, MD, UNITED STATES  
 Levesque, Paul C., Yardley, PA, UNITED STATES  
 Sun, Lucy, Newtown, PA, UNITED STATES  
 PI US 2004229315 A1 20041118  
 AI US 2004-842313 A1 20040510 (10)  
 PRAI US 2003-469894P 20030512 (60)  
 DT Utility  
 FS APPLICATION  
 LREP STEPHEN B. DAVIS, BRISTOL-MYERS SQUIBB COMPANY, PATENT DEPARTMENT, P O  
 BOX 4000, PRINCETON, NJ, 08543-4000  
 CLMN Number of Claims: 20  
 ECL Exemplary Claim: 1  
 DRWN 63 Drawing Page(s)  
 LN.CNT 23860  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB The present invention provides novel polynucleotides encoding LTRPC3g,  
 LTRPC3h, LTRPC3i, LTRPC3j, LTRPC3k, or LTRPC3l polypeptides, fragments  
 and homologues thereof. Also provided are vectors, host cells,  
 antibodies, and recombinant and synthetic methods for producing said  
 polypeptides. The invention further relates to diagnostic and  
 therapeutic methods for applying these novel LTRPC3g, LTRPC3h, LTRPC3i,  
 LTRPC3j, LTRPC3k, or LTRPC3l polypeptides to the diagnosis, treatment,  
 and/or prevention of various diseases and/or disorders related to these  
 polypeptides. The invention further relates to screening methods for  
 identifying agonists and antagonists of the polynucleotides and  
 polypeptides of the present invention.  
 SUMM . . . candidate osmoreceptor, may be involved in regulation of  
 cellular volume (Strotmann et al., 2000). CaT1 & ECaC1 may be the  
**calcium-release-activated** calcium channel and involved  
 in Ca.sup.2+ reabsorption in intestine and kidney (Peng, et al, 1999; Yu

et al., 2001).

DETD . . . and Enterohemorrhagic E. coli), Enterobacteriaceae (Klebsiella, Salmonella (e.g., Salmonella typhi, and Salmonella paratyphi), Serratia, Yersinia), Erysipelothrix, Helicobacter, Legionellosis, Leptospirosis, Listeria, **Mycoplasmatales**, Mycobacterium leprae, Vibrio cholerae, Neisseriaceae (e.g., Acinetobacter, Gonorrhea, Meningococcal), Meisseria meningitidis, Pasteurellacea Infections (e.g., Actinobacillus, Heamophilus (e.g., Heamophilus influenza type. . .

DETD [1138] Yue, L., Peng, J. B., Hediger, M. A., Clapham, D. E. CaT1 manifests the pore properties of the **calcium-release** -activated calcium channel. Nature. 410, 705-709 (2001).

L10 ANSWER 9 OF 39 USPATFULL on STN

AN 2004:179017 USPATFULL

TI Therapeutic treatment methods

IN Reading, Christopher L., San Diego, CA, UNITED STATES  
 Ahlem, Clarence N., San Diego, CA, UNITED STATES  
 Auci, Dominick L., San Diego, CA, UNITED STATES  
 Dowding, Charles, San Diego, CA, UNITED STATES  
 Frincke, James M., San Diego, CA, UNITED STATES  
 Li, Mei, San Diego, CA, UNITED STATES  
 Page, Theodore M., Carlsbad, CA, UNITED STATES  
 Stickney, Dwight R., Granite Bay, CA, UNITED STATES  
 Trauger, Richard J., Leucadia, CA, UNITED STATES  
 White, Steven K., San Diego, CA, UNITED STATES

PI US 2004138187 A1 20040715

AI US 2003-651515 A1 20030828 (10)

PRAI US 2002-407146P 20020828 (60)  
 US 2002-408332P 20020904 (60)  
 US 2003-479257P 20030617 (60)

DT Utility

FS APPLICATION

LREP HOLLIS-EDEN PHARMACEUTICALS, INC., 4435 EASTGATE MALL, SUITE 400, SAN DIEGO, CA, 92121

CLMN Number of Claims: 37

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 16128

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to the use of compounds to ameliorate or treat an condition such as a cystic fibrosis, neutropenia or other exemplified conditions. Exemplary compounds that can be used include 3 $\beta$ -hydroxy-17 $\beta$ -aminoandrost-5-ene, 3 $\beta$ -hydroxy-16 $\alpha$ -fluoro-17 $\beta$ -aminoandrost-5-ene, 3 $\alpha$ -hydroxy-16 $\alpha$ -fluoro-17 $\beta$ -aminoandrost-5-ene, 3 $\beta$ -hydroxy-16 $\beta$ -fluoro-17 $\beta$ -aminoandrost-5-ene, 1 $\alpha$ ,3 $\beta$ -dihydroxy-4 $\alpha$ -fluoroandrost-5-ene-17-one, 1 $\alpha$ ,3 $\beta$ ,17 $\beta$ -trihydroxy-4 $\alpha$ -fluoroandrost-5-ene, 1 $\beta$ ,3 $\beta$ -dihydroxy-6 $\alpha$ -bromoandrost-5-ene, 1 $\alpha$ -fluoro-3 $\beta$ ,12 $\alpha$ -dihydroxyandrost-5-ene-17-one, 1 $\alpha$ -fluoro-3 $\beta$ ,4 $\alpha$ -dihydroxyandrost-5-ene and 4 $\alpha$ -fluoro-3 $\beta$ ,6 $\alpha$ ,17 $\beta$ -trihydroxyandrostane.

SUMM . . . Morganella sp. (e.g., M. morganii), Mycobacterium sp. (e.g., M. avium, M. bovis, M. leprae, M. tuberculosis, M. pneumoniae. M. penetrans), **Mycoplasma** sp. (e.g., M. fermentans, M. penetrans, M. pneumoniae), Neisseria (e.g., N. gonorrhoeae, N. meningitidis), Nocardia asteroides, Proteus sp. (e.g., P. . .

SUMM . . . be treated, prevented or ameliorated thus include infections by intracellular or extracellular gram positive bacteria, gram-negative bacteria, acid fast bacteria, **Mycoplasma** or rickettsial infections (e.g., a rickettsial spotted fever infection or a rickettsial typhus or scrub typhus infection),. Other pathogens that. . .

SUMM . . . modulation effects of the FICs on cells or tissues include (1) inhibition of one or more of bone resorption or **calcium release** or gp80, gp130, tumor necrosis factor (TNF), osteoclast differentiation factor (RANKL/ODF), RANKUODF receptor, IL-6 or IL-6 receptor expression or biological. . .

DETD . . . Fresh blood (Rh+) is used to isolate erythrocytes (RBC). Washed RBC are infected with schizontitrophozoite parasite stages (Palo Alto strain, **mycoplasma-free**). Stage specific parasites are

isolated by the Percoll-mannitol method. Briefly, normal schizont-stage parasitized RBC (SPE) separated on Percoll-mannitol gradient (parasitemia. . .

L10 ANSWER 10 OF 39 USPATFULL on STN

AN 2004:151408 USPATFULL

TI Molecules for diagnostics and therapeutics

IN Panzer, Scott R, Sunnyvale, CA, UNITED STATES

Lincoln, Stephen E, Potomac, MD, UNITED STATES

Altus, Christina M, Campbell, CA, UNITED STATES

Dufour, Gerard E, Castro Valley, CA, UNITED STATES

Jackson, Jennifer L, Santa Cruz, CA, UNITED STATES

Jones, Anissa L, San Jose, CA, UNITED STATES

Dam, Tam C, San Jose, CA, UNITED STATES

Liu, Tommy, Daly City, CA, UNITED STATES

Harris, Bernard, Sunnyvale, CA, UNITED STATES

Flores, Vincent Z, Union City, CA, UNITED STATES

Daffo, Abel, San Jose, CA, UNITED STATES

Marwaha, Rakesh, Burnaby, CANADA

Chen, Alice J, San Jose, CA, UNITED STATES

Chang, Simon C, Sunnyvale, CA, UNITED STATES

Gerstin, Edward H, JR., San Jose, CA, UNITED STATES

Peralta, Careyna H, Santa Clara, CA, UNITED STATES

David, Marie H, Daly City, CA, UNITED STATES

Lewis, Samantha A, San Leandro, CA, UNITED STATES

PI US 2004115629 A1 20040617

AI US 2003-250889 A1 20030709 (10)

WO 2002-US1009 20020109

DT Utility

FS APPLICATION

LREP INCYTE CORPORATION, 3160 PORTER DRIVE, PALO ALTO, CA, 94304

CLMN Number of Claims: 28

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 16703

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides purified human polynucleotides for diagnostics and therapeutics (dithp). Also encompassed are the polypeptides (DITHP) encoded by dithp. The invention also provides for the use of dithp, or complements, oligonucleotides, or fragments thereof in diagnostic assays. The invention further provides for vectors and host cells containing dithp for the expression of DITHP. The invention additionally provides for the use of isolated and purified DITHP to induce antibodies and to screen libraries of compounds and the use of anti-DITHP antibodies in diagnostic assays. Also provided are microarrays containing dithp and methods of use.

SUMM . . . and diacylglycerol. These two products act as mediators for separate signaling events. IP.sub.3 diffuses through the plasma membrane to induce calcium release from the endoplasmic reticulum (ER), while diacylglycerol remains in the membrane and helps activate protein kinase C, an STK that. . .

DETD . . . gram-negative enterobacterium including shigella, salmonella, or campylobacter, pseudomonas, vibrio, brucella, francisella, yersinia, bartonella, norcardium, actinomyces, mycobacterium, spirochaetale, rickettsia, chlamydia, or mycoplasma; an infection caused by a fungal agent classified as aspergillus, blastomyces, dermatophytes, cryptococcus, coccidioides, malassezia, histoplasma, or other mycosis-causing fungal. . .

L10 ANSWER 11 OF 39 USPATFULL on STN

AN 2004:63735 USPATFULL

TI Molecules for diagnostics and therapeutics

IN Panzer, Scott R., Sunnyvale, CA, UNITED STATES

Spiro, Peter A., Palo Alto, CA, UNITED STATES

Banville, Steven C., Palo Alto, CA, UNITED STATES

Shah, Purvi, San Jose, CA, UNITED STATES

Chalup, Michael S., Sunnyvale, CA, UNITED STATES

Chang, Simon C, Mountain View, CA, UNITED STATES

Chen, Alice J., San Jose, CA, UNITED STATES



D'Sa, Steven A., East Palo, CA, UNITED STATES  
 Amshey, Stefan, San Francisco, CA, UNITED STATES  
 Dahl, Christopher E., Fremont, CA, UNITED STATES  
 Dam, Tam C., San Jose, CA, UNITED STATES  
 Daniels, Susan E., Palo Alto, CA, UNITED STATES  
 Dufour, Gerard E., Castro Valley, CA, UNITED STATES  
 Flores, Vincent, Union City, CA, UNITED STATES  
 Fong, Willy T., San Francisco, CA, UNITED STATES  
 Greenawalt, Lila B., San Jose, CA, UNITED STATES  
 Jackson, Jennifer L., Mountain View, CA, UNITED STATES  
 Jones, Anissa L., San Jose, CA, UNITED STATES  
 Liu, Tommy F., Daly City, CA, UNITED STATES  
 Lincoln, Ann M. Roseberry, Redwood City, CA, UNITED STATES  
 Rosen, Bruce H., Menlo Park, CA, UNITED STATES  
 Russo, Frank D., Rossette Court Sunnyvale, CA, UNITED STATES  
 Stockdreher, Theresa K., Sunnyvale, CA, UNITED STATES  
 Daffo, Abel, San Jose, CA, UNITED STATES  
 Wright, Rachel J., Mountain View, CA, UNITED STATES  
 Yap, Pierre E., Lafayette, CA, UNITED STATES  
 Yu, Jimmy Y., Fremont, CA, UNITED STATES  
 Bradley, Diana L., Soquel, CA, UNITED STATES  
 Bratcher, Shawn R., Mountain View, CA, UNITED STATES  
 Chen, Wensheng, Mountain View, CA, UNITED STATES  
 Cohen, Howard J., Palo Alto, CA, UNITED STATES  
 Hodgson, David M., Ann Arbor, MI, UNITED STATES  
 Lincoln, Stephen E., Redwood City, CA, UNITED STATES  
 Jackson, Stuart E., Mountain View, CA, UNITED STATES

PI US 2004048253 A1 20040311  
 AI US 2003-220120 A1 20030605 (10)  
 WO 2001-US6059 20010221

DT Utility

FS APPLICATION

LREP Incyte Genomics Inc, Legal Department, 3160 Porter Drive, Palo Alto, CA, 94304

CLMN Number of Claims: 27

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 17872

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides purified human polynucleotides for diagnostics and therapeutics (dithp). Also encompassed are the polypeptides (DITHP) encoded by dithp. The invention also provides for the use of dithp, or complements, oligonucleotides, or fragments thereof in diagnostic assays. The invention further provides for vectors and host cells containing dithp for the expression of DITHP. The invention additionally provides for the use of isolated and purified DITHP to induce antibodies and to screen libraries of compounds and the use of anti-DITHP antibodies in diagnostic assays. Also provided are microarrays containing dithp and methods of use.

SUMM . . . and diacylglycerol. These two products act as mediators for separate signaling events. IP.sub.3 diffuses through the plasma membrane to induce **calcium release** from the endoplasmic reticulum (ER), while diacylglycerol remains in the membrane and helps activate protein kinase C, an STK that. . .

SUMM . . . gram-negative enterobacterium including shigella, salmonella, or campylobacter, pseudomonas, vibrio, brucella, francisella, yersinia, bartonella, norcardium, actinomycetes, mycobacterium, spirochaetale, rickettsia, chlamydia, or **mycoplasma**; an infection caused by a fungal agent classified as aspergillus, blastomyces, dermatophytes, cryptococcus, coccidioides, malassezia, histoplasma, or other mycosis-causing fungal. . .

L10 ANSWER 12 OF 39 USPATFULL on STN

AN 2004:31195 USPATFULL

TI Modified transferrin fusion proteins

IN Prior, Christopher P., Philadelphia, PA, UNITED STATES

PA BioRexis Pharmaceutical Corporation (U.S. corporation)

PI US 2004023334 A1 20040205

AI US 2002-231494 A1 20020830 (10)

PRAI US 2001-315745P 20010830 (60)  
US 2001-334059P 20011130 (60)  
DT Utility  
FS APPLICATION  
LREP MORGAN LEWIS & BOCKIUS LLP, 1111 PENNSYLVANIA AVENUE NW, WASHINGTON, DC,  
20004  
CLMN Number of Claims: 56  
ECL Exemplary Claim: 1  
DRWN 14 Drawing Page(s)  
LN.CNT 15780

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Modified fusion proteins of transferrin and therapeutic proteins or peptides with increased serum half-life or serum stability are disclosed. Preferred fusion proteins include those modified so that the transferrin moiety exhibits no or reduced glycosylation, binding to iron and/or binding to the transferrin receptor.

DETD . . . prostaglandin (E2) release as well as an  
release and Ocytocin (Ca2+) immunologic disorders, cancer  
physin I) B24085 increased  
amount of calcium release by increase can  
be assayed by methods  
and smooth  
muscle cells. well-known in the art, for  
example,

B24086

Pavan et. . .

DETD . . . (e.g., Streptococcus pneumoniae (pneumococcal pneumonia), Staphylococcus aureus (staphylococcal pneumonia), Gram negative bacteria pneumonia (caused by, e.g., Klebuella and Pseudomas spp.), Mycoplasma pneumoniae pneumonia, Hemophilus influenza pneumonia, Legionella pneumophila (Legionnaires' disease), and Chlamydapsittaci (Psittacosis)), and viral pneumonia (e.g., influenza, chickenpox (varicella).

DETD . . . Cryptococcus neoformans; aspergillosis, caused by Aspergillus spp.) candidiasis, caused by Candida; and mucormycosis)), Pneumocystis carini (pneumocystis pneumonia), a typical pneumonias (e.g., Mycoplasma and Chlamyda spp.), opportunistic infection pneumonia, nosocomial pneumonia, chemical pneumonitis, and aspiration pneumonia, pleural disorders (e.g., pleurisy, pleural effusion, and pneumothorax.

DETD . . . Serratia, Yersinia, Shigella), Erysipelothrix, Haemophilus (e.g., Haemophilus influenza type B), Helicobacter, Legionella (e.g., Legionella pneumophila), Leptospira, Listeria (e.g., Listeria monocytogenes), Mycoplasma, Mycobacterium (e.g., Mycobacterium, leprae and Mycobacterium tuberculosis), Vibrio (e.g., Vibrio cholerae), Neisseriaceae (e.g., Neisseria gonorrhea, Neisseria meningitidis), Pasteurellaceae, Proteus, Pseudomonas (e.g., . . .

L10 ANSWER 13 OF 39 USPATFULL on STN

AN 2004:18785 USPATFULL

TI Molecules for diagnostics and therapeutics

IN Hodgson, David M., Ann Arbor, MI, UNITED STATES  
Lincoln, Stephen E., Potomac, MD, UNITED STATES  
Russo, Frank D., Sunnyvale, CA, UNITED STATES  
Albany, Peter A., Berkeley, CA, UNITED STATES  
Banville, Steve C., Sunnyvale, CA, UNITED STATES  
Bratcher, Shawn R., Mountain View, CA, UNITED STATES  
Dufour, Gerard E., Castro Valley, CA, UNITED STATES  
Cohen, Howard J., Palo Alto, CA, UNITED STATES  
Rosen, Bruce H., Menlo Park, CA, UNITED STATES  
Chalup, Michael S., Livingston, TX, UNITED STATES  
Jackson, Jennifer L., Santa Cruz, CA, UNITED STATES  
Jones, Anissa L., San Jose, CA, UNITED STATES  
Yu, Jimmy Y., Fremont, CA, UNITED STATES  
Greenawalt, Lila B., San Jose, CA, UNITED STATES  
Panzer, Scott R., Sunnyvale, CA, UNITED STATES  
Roseberry Lincoln, Ann M., Potomac, MD, UNITED STATES  
Wright, Rachel J., Merivale, NEW ZEALAND  
Daniels, Susan E., Mountain View, CA, UNITED STATES

PA Incyte Corporation, Palo Alto, CA, UNITED STATES (U.S. corporation)  
 PI US 2004014087 A1 20040122  
 AI US 2003-378029 A1 20030228 (10)  
 RLI Continuation-in-part of Ser. No. US 2001-980285, filed on 30 Nov 2001,  
 PENDING A 371 of International Ser. No. WO 2000-US15404, filed on 31 May  
 2000, PENDING  
 PRAI US 1999-147500P 19990805 (60)  
 US 1999-147542P 19990805 (60)  
 US 1999-147541P 19990805 (60)  
 US 1999-147824P 19990805 (60)  
 US 1999-147547P 19990805 (60)  
 US 1999-147530P 19990805 (60)  
 US 1999-147536P 19990805 (60)  
 US 1999-147520P 19990805 (60)  
 US 1999-147527P 19990805 (60)  
 US 1999-147549P 19990805 (60)  
 US 1999-147377P 19990804 (60)  
 US 1999-147436P 19990804 (60)  
 US 1999-137411P 19990603 (60)  
 US 1999-137396P 19990603 (60)  
 US 1999-137417P 19990603 (60)  
 US 1999-137337P 19990603 (60)  
 US 1999-137173P 19990602 (60)  
 US 1999-137114P 19990602 (60)  
 US 1999-137259P 19990602 (60)  
 US 1999-137113P 19990602 (60)  
 US 1999-137260P 19990602 (60)  
 US 1999-137258P 19990602 (60)  
 US 1999-137109P 19990602 (60)  
 US 1999-137161P 19990601 (60)  
 DT Utility  
 FS APPLICATION  
 LREP INCYTE CORPORATION (formerly known as Incyte, Genomics, Inc.), 3160  
 PORTER DRIVE, PALO ALTO, CA, 94304  
 CLMN Number of Claims: 19  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 14819  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB The present invention provides purified human polynucleotides for  
 diagnostics and therapeutics (dithp). Also encompassed are the  
 polypeptides (DITHP) encoded by dithp. The invention also provides for  
 the use of dithp, or complements, oligonucleotides, or fragments thereof  
 in diagnostic assays. The invention further provides for vectors and  
 host cells containing dithp for the expression of DITHP. The invention  
 additionally provides for the use of isolated and purified DITHP to  
 induce antibodies and to screen libraries of compounds and the use of  
 anti-DITHP antibodies in diagnostic assays. Also provided are  
 microarrays containing dithp and methods of use.  
 SUMM . . . and diacylglycerol. These two products act as mediators for  
 separate signaling events. IP.sub.3 diffuses through the plasma membrane  
 to induce **calcium release** from the endoplasmic  
 reticulum (ER), while diacylglycerol remains in the membrane and helps  
 activate protein kinase C, an STK that. . .  
 SUMM . . . gram-negative enterobacterium including shigella, salmonella,  
 or campylobacter, pseudomonas, vibrio, brucella, francisella, yersinia,  
 bartonella, norcardium, actinomyces, mycobacterium, spirochaetale,  
 rickettsia, chlamydia, or **mycoplasma**; an infection caused by a  
 fungal agent classified as aspergillus, blastomyces, dermatophytes,  
 cryptococcus, coccidioides, malassezia, histoplasma, or other  
 mycosis-causing fungal. . .  
 L10 ANSWER 14 OF 39 USPATFULL on STN  
 AN 2004:66006 USPATFULL  
 TI DNA array sequence selection  
 IN Lorenz, Matthias, Bethesda, MD, United States  
 PA The United States of America as represented by the Department of Health  
 and Human Services, Washington, DC, United States (U.S. government)  
 PI US 6706867 B1 20040316

AI US 2000-741238 20001219 (9)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Horlick, Kenneth R.; Assistant Examiner: Wilder, Cynthia  
LREP Leydig, Voit & Mayer, Ltd.  
CLMN Number of Claims: 8  
ECL Exemplary Claim: 1  
DRWN 3 Drawing Figure(s); 29 Drawing Page(s)  
LN.CNT 23532  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The present invention provides methods and compositions for the construction of custom cDNA microarrays. In particular, the methods involve the selection of relevant clusters based on knowledge and expression patterns using public database information and the identification of the best representative cDNA clones within the selected cluster. The methods facilitate the construction of custom microarrays suitable for use in any biotechnological art. In preferred embodiments, the present invention provides the the ImmunoChip.  
DETD . . . RIP110| gi = 709960 1210518  
IC02009 UG75 Expression GENE Mm.3860 TITLE receptor-like tyrosine kinase GENE Ryk Vik| gi = 309443 1194984  
calcium release channel isoform 1|muscle ryanodine  
IC02010 UG75 Expression GENE Mm.4519 TITLE ryanodine receptor 1, skeletal muscle GENE Ryrl receptor|Ryr| gi = 639812. . .  
DETD . . . ESTs gi = 6084017 1362536  
IC05374 UG75 Expression EST Mm.22244 TITLE ESTs, Moderately similar to DNAJ PROTEIN gi = 6084804 958997  
[Mycoplasma genitalium]  
IC05375 UG75 Expression EST Mm.22246 TITLE ESTs, Moderately similar to neuromedin B gi = 5906518 577022  
precursor [R. norvegicus]  
IC05376 UG75. . .

L10 ANSWER 15 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 2003:836908 CAPLUS  
DN 139:336910  
TI Mycoplasma hyopneumoniae polypeptides inducing calcium release from ciliated tracheal cells  
IN Hsu, Walter H.; Young, Theresa F.; Ross, Richard F.; Zhou, En-Min  
PA Iowa State University Research Foundation, Inc., USA  
SO PCT Int. Appl., 49 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003086473	A1	20031023	WO 2003-US10305	20030404
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2481042	AA	20031023	CA 2003-2481042	20030404
AU 2003221791	A1	20031027	AU 2003-221791	20030404
EP 1496945	A1	20050119	EP 2003-718191	20030404
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1658906	A	20050824	CN 2003-813128	20030404
JP 2005535573	T2	20051124	JP 2003-583487	20030404
US 2005287163	A1	20051229	US 2005-509926	20050729
PRAI US 2002-370344P	P	20020405		
WO 2003-US10305	W	20030404		

AB The authors disclose **mycoplasma** polypeptides having the ability to increase **calcium release** from cells (e.g., porcine ciliated tracheal cells) as well as antibodies that bind to such **mycoplasma** polypeptides. In addition, the invention provides methods for identifying inhibitors of **mycoplasma-induced calcium release** from porcine ciliated tracheal cells.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

TI **Mycoplasma hyopneumoniae** polypeptides inducing **calcium release** from ciliated tracheal cells

AB The authors disclose **mycoplasma** polypeptides having the ability to increase **calcium release** from cells (e.g., porcine ciliated tracheal cells) as well as antibodies that bind to such **mycoplasma** polypeptides. In addition, the invention provides methods for identifying inhibitors of **mycoplasma-induced calcium release** from porcine ciliated tracheal cells.

ST **Mycoplasma** polypeptide **calcium release** trachea antibody

IT G proteins (guanine nucleotide-binding proteins)  
RL: BSU (Biological study, unclassified); BIOL (Biological study) (Gi (adenylate cyclase-inhibiting); in signaling pathway for intracellular **calcium release** by ciliated tracheal cells in response to **Mycoplasma hyopneumoniae** polypeptides)

IT G proteins (guanine nucleotide-binding proteins)  
RL: BSU (Biological study, unclassified); BIOL (Biological study) (Go; in signaling pathway for intracellular **calcium release** by ciliated tracheal cells in response to **Mycoplasma hyopneumoniae** polypeptides)

IT Biological transport  
(calcium; intracellular **calcium release** in ciliated tracheal cells in response to **Mycoplasma hyopneumoniae**)

IT Epithelium  
(ciliated, tracheal; membrane polypeptides of **Mycoplasma hyopneumoniae** induce intracellular **calcium release** by)

IT Trachea (anatomical)  
(epithelium, ciliated cell; membrane polypeptides of **Mycoplasma hyopneumoniae** induce intracellular **calcium release** by)

IT Bioassay  
(for antagonists of tracheal epithelium intracellular **calcium release** in response to membrane proteins of **Mycoplasma hyopneumoniae**)

IT Signal transduction, biological  
(for intracellular **calcium release** by ciliated tracheal cells in response to **Mycoplasma hyopneumoniae** polypeptides)

IT Endoplasmic reticulum  
(intracellular **calcium release** in ciliated tracheal cells in response to **Mycoplasma hyopneumoniae**)

IT **Mycoplasma hyopneumoniae**  
(membrane polypeptides of **Mycoplasma hyopneumoniae** induce intracellular **calcium release** by ciliated tracheal cells)

IT *Sus scrofa domestica*  
(membrane polypeptides of **Mycoplasma hyopneumoniae** induce intracellular **calcium release** by ciliated tracheal cells of)

IT Mammalia  
Mus  
*Oryctolagus cuniculus*  
(membrane proteins of **Mycoplasma hyopneumoniae** for elicitation of antibody response in)

IT Proteins  
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)  
(membrane; of pathogenic **Mycoplasma hyopneumoniae** induce intracellular **calcium release** by ciliated tracheal cells)

IT Antibodies and Immunoglobulins  
 RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)  
 (monoclonal; to membrane proteins of **Mycoplasma hyopneumoniae** inducing intracellular **calcium release** by ciliated tracheal cells)

IT Antibodies and Immunoglobulins  
 RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)  
 (to membrane proteins of **Mycoplasma hyopneumoniae** inducing intracellular **calcium release** by ciliated tracheal cells)

IT 9001-92-7, Protease  
 RL: ANT (Analyte); ANST (Analytical study)  
 (antagonist of tracheal epithelium intracellular **calcium release** in response to membrane proteins of **Mycoplasma hyopneumoniae**)

IT 9002-07-7, Trypsin  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (enhanced intracellular **calcium release** by ciliated tracheal cells in response to **Mycoplasma hyopneumoniae** membrane proteins solubilized by)

IT 9001-86-9, Phospholipase C  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (in signaling pathway for intracellular **calcium release** by ciliated tracheal cells in response to **Mycoplasma hyopneumoniae** polypeptides)

IT 7440-70-2, Calcium, biological studies  
 RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)  
 (transport; intracellular **calcium release** in ciliated tracheal cells in response to **Mycoplasma hyopneumoniae**)

L10 ANSWER 16 OF 39 USPATFULL on STN  
 AN 2003:319238 USPATFULL  
 TI Immune-modulating peptide  
 IN Ryu, Sung-Ho, Pohang-city, KOREA, REPUBLIC OF  
 Suh, Pann-Ghill, Pohang-city, KOREA, REPUBLIC OF  
 Bae, Yoe-Sik, Pohang-city, KOREA, REPUBLIC OF  
 Song, Ji-Young, Pohang-city, KOREA, REPUBLIC OF  
 PI US 2003224987 A1 20031204  
 AI US 2003-353419 A1 20030129 (10)  
 PRAI US 2002-352930P 20020129 (60)  
 DT Utility  
 FS APPLICATION  
 LREP BAKER & BOTTS, 30 ROCKEFELLER PLAZA, NEW YORK, NY, 10112  
 CLMN Number of Claims: 29  
 ECL Exemplary Claim: 1  
 DRWN 8 Drawing Page(s)  
 LN.CNT 1442

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are peptides having SEQ ID NOs: 1 to 24 that induce superoxide generation by human monocytes or neutrophils; that induce an intracellular calcium increase by human peripheral blood monocytes or neutrophils; binds to formyl peptide receptor or formyl peptide receptor-like 1; that induce chemotactic migration of human monocytes or neutrophils in vitro; that induce degranulation in formyl peptide receptor expressing cells or formyl peptide receptor-like 1 expressing cells; that stimulate extracellular signal regulated protein kinase phosphorylation via activation of formyl peptide receptor or formyl peptide receptor-like 1; or that stimulate Akt phosphorylation via activation of formyl peptide receptor or formyl peptide receptor-like 1.

DETD . . . selected from the group consisting of SEQ ID NO: 1 to SEQ ID NO: 24. The condition may be bacterial, **mycoplasma**, yeast, fungal, a viral infection, or inflammation.

DETD [0091] From the new finding that cytosolic **calcium release** was induced by WKYMVm and many of the substituted

peptides of WKYVMm but not by some of them (WKGMVm, WKRMVm,. . .  
DETD . . . cells (FIG. 6A). These results absolutely correlate with the  
previous results that WKGMVm-WKRMVm- and D-Met6-substituted peptides  
could not induce cytosolic **calcium release** (FIG.  
1A). Unlike in FPR-expressing RBL-2H3 cells, all the peptides (WKYVMm,  
WKGMVm, WKRMVm, WKYVMVE, WKYVMR), but not fMLF or wkymvm,. . .  
CLM What is claimed is:  
7. The method according to claim 14 wherein the condition is bacterial,  
**mycoplasma**, yeast, fungal, or viral infection.

L10 ANSWER 17 OF 39 USPATFULL on STN

AN 2003:318706 USPATFULL

TI Polynucleotide encoding a novel TRP channel family member, LTRPC3, and  
splice variants thereof

IN Lee, Ning, Belle Mead, NJ, UNITED STATES  
Chen, Jian, Princeton, NJ, UNITED STATES  
Feder, John N., Belle Mead, NJ, UNITED STATES  
Wu, Shujian, Langhorne, PA, UNITED STATES  
Lee, Liana M., Somerset, NJ, UNITED STATES  
Blonar, Michael A., Malvern, PA, UNITED STATES  
Bol, David, Gaithersburg, MD, UNITED STATES  
Levesque, Paul C., Yardley, PA, UNITED STATES  
Sun, Lucy, Newtown, PA, UNITED STATES

PI US 2003224450 A1 20031204

AI US 2003-405793 A1 20030328 (10)

RLI Continuation-in-part of Ser. No. US 2002-210152, filed on 1 Aug 2002,  
PENDING

PRAI US 2001-309544P 20010802 (60)

DT Utility

FS APPLICATION

LREP STEPHEN B. DAVIS, BRISTOL-MYERS SQUIBB COMPANY, PATENT DEPARTMENT, P O  
BOX 4000, PRINCETON, NJ, 08543-4000

CLMN Number of Claims: 26

ECL Exemplary Claim: 1

DRWN 53 Drawing Page(s)

LN.CNT 23133

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides novel polynucleotides encoding LTRPC3  
polypeptides, fragments and homologues thereof. The present invention  
also provides polynucleotides encoding variants and splice variants of  
LTRPC3 polypeptides, LTRPC3b, LTRPC3c, LTRPC3d, LTRPC3e, and LTRPC3f,  
respectively. Also provided are vectors, host cells, antibodies, and  
recombinant and synthetic methods for producing said polypeptides. The  
invention further relates to diagnostic and therapeutic methods for  
applying these novel LTRPC3, LTRPC3b, LTRPC3c, LTRPC3d, LTRPC3e, and  
LTRPC3f polypeptides to the diagnosis, treatment, and/or prevention of  
various diseases and/or disorders related to these polypeptides. The  
invention further relates to screening methods for identifying agonists  
and antagonists of the polynucleotides and polypeptides of the present  
invention.

SUMM . . . candidate osmoreceptor, may be involved in regulation of  
cellular volume (Strotmann et al., 2000). CaT1 & ECaC1 may be the  
**calcium-release**-activated calcium channel and involved  
in Ca<sup>sup.2+</sup> reabsorption in intestine and kidney (Peng, et al, 1999; Yu  
et al., 2001).

DETD . . . and Enterohemorrhagic E. coli), Enterobacteriaceae (Klebsiella,  
Salmonella (e.g., Salmonella typhi, and Salmonella paratyphi), Serratia,  
Yersinia), Erysipelothrix, Helicobacter, Legionellosis, Leptospirosis,  
Listeria, **Mycoplasmatales**, Mycobacterium leprae, Vibrio  
cholerae, Neisseriaceae (e.g., Acinetobacter, Gonorrhea, Meningococcal),  
Meisseria meningitidis, Pasteurellacea Infections (e.g., Actinobacillus,  
Heamophilus (e.g., Heamophilus influenza type. . .

DETD [1132] Yue, L., Peng, J. B., Hediger, M. A., Clapham, D. E. CaT1  
manifests the pore properties of the **calcium-release**  
-activated calcium channel. Nature. 410, 705-709 (2001).

L10 ANSWER 18 OF 39 USPATFULL on STN

AN 2003:237385 USPATFULL

TI Methods and compositions for promoting immunopotentialiation  
IN Bluestone, Jeffery A., Chicago, IL, UNITED STATES  
PA ARCH Development Corporation (U.S. corporation)  
PI US 2003165542 A1 20030904  
AI US 2002-67104 A1 20020204 (10)  
RLI Division of Ser. No. US 1995-459486, filed on 2 Jun 1995, GRANTED, Pat.  
No. US 6406696 Division of Ser. No. US 1994-286805, filed on 5 Aug 1994,  
GRANTED, Pat. No. US 6113901 Continuation of Ser. No. US 1992-990553,  
filed on 14 Dec 1992, ABANDONED Continuation of Ser. No. US 1990-524304,  
filed on 16 May 1990, ABANDONED Continuation of Ser. No. US 1989-429729,  
filed on 27 Oct 1989, ABANDONED  
DT Utility  
FS APPLICATION  
LREP Gina N. Shishima, FULBRIGHT & JAWORSKI L.L.P., Suite 2400, 600 Congress  
Avenue, Austin, TX, 78701  
CLMN Number of Claims: 54  
ECL Exemplary Claim: 1  
DRWN 15 Drawing Page(s)  
LN.CNT 2522  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB This invention discloses immunopotentiating agents which stimulate an  
immune response. These agents are categorized into single agents that  
act directly, adjuvants added concurrently with the agents, or  
heteroconjugates. Heteroconjugate agents elicit or enhance a cellular  
or humoral immune response which may be specific for an epitope  
contained within an amino acid sequence. Enhanced hematopoieses by bone  
marrow stem cell recruitment was also a result of administering some of  
these agents.  
SUMM . . . is not limited to, increased cell proliferation and DNA  
synthesis, lymphokine and cytotoxic cell production, a rapid rise in  
intracellular calcium, release of water soluble  
inositol phosphates, increased IL-2 receptor expression, enhanced  
proliferative response to IL-2, and enhanced responses to foreign  
antigens. . . .  
SUMM . . . such as staphylococcal enterotoxins A, C.sub.1 C.sub.2, D, E,  
toxic shock syndrome toxin (TSST), exfoliating toxin (ExFT) and likely  
even mycoplasma arthritidis substance, will find similar  
utility.  
DETD . . . as these can be readily employed to screen for and identify  
other suitable immunopotentialiation agents such as immunopotentiating  
bacterial or mycoplasmal proteins. Furthermore, assays such as  
these can be employed as an initial step in the determination of  
appropriate dosages in. . . .  
L10 ANSWER 19 OF 39 USPATFULL on STN  
AN 2003:231989 USPATFULL  
TI Polynucleotide encoding a novel TRP channel family member, LTRPC3, and  
splice variants thereof  
IN Lee, Ning, Belle Mead, NJ, UNITED STATES  
Chen, Jian, Princeton, NJ, UNITED STATES  
Feder, John, Belle Mead, NJ, UNITED STATES  
Wu, Shujian, Langhorne, PA, UNITED STATES  
Lee, Liana, North Brunswick, NJ, UNITED STATES  
Blonar, Michael A., Malvern, PA, UNITED STATES  
Bol, David, Langhorne, PA, UNITED STATES  
Levesque, Paul C., Yardley, PA, UNITED STATES  
Sun, Lucy, Newtown, PA, UNITED STATES  
PI US 2003162189 A1 20030828  
AI US 2002-210152 A1 20020801 (10)  
PRAI US 2001-309544P 20010802 (60)  
DT Utility  
FS APPLICATION  
LREP STEPHEN B. DAVIS, BRISTOL-MYERS SQUIBB COMPANY, PATENT DEPARTMENT, P O  
BOX 4000, PRINCETON, NJ, 08543-4000  
CLMN Number of Claims: 21  
ECL Exemplary Claim: 1  
DRWN 50 Drawing Page(s)  
LN.CNT 22664  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.



AB The present invention provides novel polynucleotides encoding LTRPC3 polypeptides, fragments and homologues thereof. The present invention also provides polynucleotides encoding variants and splice variants of LTRPC3 polypeptides, LTRPC3b, LTRPC3c, LTRPC3d, LTRPC3e, and LTRPC3f, respectively. Also provided are vectors, host cells, antibodies, and recombinant and synthetic methods for producing said polypeptides. The invention further relates to diagnostic and therapeutic methods for applying these novel LTRPC3, LTRPC3b, LTRPC3c, LTRPC3d, LTRPC3e, and LTRPC3f polypeptides to the diagnosis, treatment, and/or prevention of various diseases and/or disorders related to these polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of the polynucleotides and polypeptides of the present invention.

SUMM . . . candidate osmoreceptor, may be involved in regulation of cellular volume (Strotmann et al., 2000). CaT1 & ECaC1 may be the **calcium-release-activated** calcium channel and involved in Ca<sup>sup.2+</sup> reabsorption in intestine and kidney (Peng, et al, 1999; Yu et al., 2001).

DETD . . . and Enterohemorrhagic E. coli), Enterobacteriaceae (Kiebsiella, Salmonella (e.g., Salmonella typhi, and Salmonella paratyphi), Serratia, Yersinia), Erysipelothrix, Helicobacter, Legionellosis, Leptospirosis, Listeria, **Mycoplasmatales**, Mycobacterium leprae, Vibrio cholerae, Neisseriaceae (e.g., Acinetobacter, Gonorrhea, Meningococcal), Meisseria meningitidis, Pasteurellacea Infections (e.g., Actinobacillus, Heamophilus (e.g., Heamophilus influenza type. . .

DETD [1129] Yue, L., Peng, J. B., Hediger, M. A., Clapham, D. E. CaT1 manifests the pore properties of the **calcium-release-activated** calcium channel. Nature. 410, 705-709 (2001).

L10 ANSWER 20 OF 39 USPATFULL on STN

AN 2003:219631 USPATFULL

TI Full-length human cDNAs encoding potentially secreted proteins

IN Dumas Milne Edwards, Jean-Baptiste, Paris, FRANCE

Bougueleret, Lydie, Petit Lancy, SWITZERLAND

Jobert, Severin, Paris, FRANCE

PI US 2003152921 A1 20030814

AI US 2001-876997 A1 20010608 (9)

RLI Continuation-in-part of Ser. No. US 2000-731872, filed on 7 Dec 2000, PENDING

PRAI US 1999-169629P 19991208 (60)

US 2000-187470P 20000306 (60)

DT Utility

FS APPLICATION

LREP Frank C. Eisenschenk, Ph.D., SALIWANCHIK, LLOYD & SALIWANCHIK, 2421 N.W. 41 STREET, SUITE A-1, GAINESVILLE, FL, 32606-6669

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN 5 Drawing Page(s)

LN.CNT 27600

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention concerns GENSET polynucleotides and polypeptides. Such GENSET products may be used as reagents in forensic analyses, as chromosome markers, as tissue/cell/organelle-specific markers, in the production of expression vectors. In addition, they may be used in screening and diagnosis assays for abnormal GENSET expression and/or biological activity and for screening compounds that may be used in the treatment of GENSET-related disorders.

DETD . . . calmodulin, immunophilins (FK506 binding proteins), and in skeletal muscle the dihydropyridine receptor. The RyR from skeletal muscle is the major **calcium release** channel for that tissue, and the most intensively studied of the three genetic isoforms detected thus far in mammalian species.. . .

DETD . . . gram-negative enterobacterium including shigella, salmonella, and campylobacter, pseudomonas, vibrio, brucella, francisella, yersinia, bartonella, norcardium, actinomycetes, mycobacterium, spirochaetale, rickettsia, chlamydia, and **mycoplasma**; infections by fungal agents classified as aspergillus, blastomyces, dermatophytes, cryptococcus, coccidioides, malassezia, histoplasma, and other fungal agents causing various mycoses;. . .

L10 ANSWER 21 OF 39 USPATFULL on STN  
AN 2003:207830 USPATFULL  
TI Polynucleotide encoding a novel TRP channel family member, TRP-PLIK2, and splice variants thereof  
IN Lee, Ning, Bellemead, NJ, UNITED STATES  
Chen, Jian, Princeton, NJ, UNITED STATES  
Feder, John N., Belle Mead, NJ, UNITED STATES  
Wu, Shujian, Langhorne, PA, UNITED STATES  
Chang, Han, Princeton Junction, NJ, UNITED STATES  
Lee, Liana, North Brunswick, NJ, UNITED STATES  
Blonar, Michael A., Malvern, PA, UNITED STATES  
Bol, David, Langhorne, PA, UNITED STATES  
PI US 2003144191 A1 20030731  
AI US 2002-153244 A1 20020522 (10)  
PRAI US 2001-292599P 20010522 (60)  
US 2002-362944P 20020308 (60)  
DT Utility  
FS APPLICATION  
LREP STEPHEN B. DAVIS, BRISTOL-MYERS SQUIBB COMPANY, PATENT DEPARTMENT, P O BOX 4000, PRINCETON, NJ, 08543-4000  
CLMN Number of Claims: 19  
ECL Exemplary Claim: 1  
DRWN 51 Drawing Page(s)  
LN.CNT 20954  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The present invention provides novel polynucleotides encoding TRP-PLIK2 polypeptides, fragments and homologues thereof. The present invention also provides polynucleotides encoding variants and splice variants of TRP-PLIK2 polypeptides, TRP-PLIK2b, TRP-PLIK2c, and TRP-PLIK2d, respectively. Also provided are vectors, host cells, antibodies, and recombinant and synthetic methods for producing said polypeptides. The invention further relates to diagnostic and therapeutic methods for applying these novel TRP-PLIK2, TRP-PLIK2b, TRP-PLIK2c, and TRP-PLIK2d polypeptides to the diagnosis, treatment, and/or prevention of various diseases and/or disorders related to these polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of the polynucleotides and polypeptides of the present invention.  
SUMM . . . candidate osmoreceptor, may be involved in regulation of cellular volume (Strotmann et al., 2000). CaTgi & ECaCl may be the **calcium-release**-activated calcium channel and involved in Ca.sup.2+ reabsorption in intestine and kidney (Peng, et al, 1999; Yu et al., 2001).  
DETD . . . and Enterohemorrhagic E. coli), Enterobacteriaceae (Klebsiella, Salmonella (e.g., Salmonella typhi, and Salmonella paratyphi), Serratia, Yersinia), Erysipelothrix, Helicobacter, Legionellosis, Leptospirosis, Listeria, **Mycoplasmatales**, Mycobacterium leprae, Vibrio cholerae, Neisseriaceae (e.g., Acinetobacter, Gonorrhea, Meningococcal), Meisseria meningitidis, Pasteurellaceae Infections (e.g., Actinobacillus, Heamophilus (e.g., Heamophilus influenza type. . .  
DETD [0943] Yue, L., Peng, J. B., Hediger, M. A., Clapham, D. E. CaT1 manifests the pore properties of the **calcium-release**-activated calcium channel. Nature. 410, 705-709 (2001).

L10 ANSWER 22 OF 39 USPATFULL on STN  
AN 2003:120747 USPATFULL  
TI Blood cell deficiency treatment method  
IN Ahlem, Clarence N., San Diego, CA, UNITED STATES  
Reading, Christopher, San Diego, CA, UNITED STATES  
Frincke, James, San Diego, CA, UNITED STATES  
Stickney, Dwight, Granite Bay, CA, UNITED STATES  
Lardy, Henry A., Madison, WI, UNITED STATES  
Marwah, Padma, Middleton, WI, UNITED STATES  
Marwah, Ashok, Middleton, WI, UNITED STATES  
Prendergast, Patrick T., Straffan, IRELAND  
PI US 2003083231 A1 20030501  
AI US 2002-87929 A1 20020301 (10)  
RLI Continuation-in-part of Ser. No. US 2000-675470, filed on 28 Sep 2000,

PENDING Continuation-in-part of Ser. No. US 2001-820483, filed on 29 Mar 2001, PENDING Continuation-in-part of Ser. No. US 2000-535675, filed on 23 Mar 2000, PENDING Continuation-in-part of Ser. No. US 1999-449004, filed on 24 Nov 1999, ABANDONED Continuation-in-part of Ser. No. US 1999-449184, filed on 24 Nov 1999, ABANDONED Continuation-in-part of Ser. No. US 1999-449042, filed on 24 Nov 1999, ABANDONED Continuation-in-part of Ser. No. US 1999-461026, filed on 15 Dec 1999, ABANDONED Continuation-in-part of Ser. No. US 2000-586673, filed on 1 Jun 2000, ABANDONED Continuation-in-part of Ser. No. US 2000-586672, filed on 1 Jun 2000, ABANDONED Continuation-in-part of Ser. No. US 1999-414905, filed on 8 Oct 1999, ABANDONED

PRAI US 1999-161453P 19991025 (60)  
US 2001-272624P 20010301 (60)  
US 2001-323016P 20010911 (60)  
US 2001-340045P 20011130 (60)  
US 2001-328738P 20011011 (60)  
US 2001-338015P 20011108 (60)  
US 2001-343523P 20011220 (60)  
US 1999-126056P 19991019 (60)  
US 1999-124087P 19990311 (60)  
US 1998-109923P 19981124 (60)  
US 1998-109924P 19981124 (60)  
US 1998-110127P 19981127 (60)  
US 1998-112206P 19981215 (60)  
US 1999-145823P 19990727 (60)  
US 1999-137745P 19990603 (60)  
US 1999-140028P 19990616 (60)

DT Utility

FS APPLICATION

LREP HOLLIS-EDEN PHARMACEUTICALS, INC., 4435 EASTGATE MALL, SUITE 400, SAN DIEGO, CA, 92121

CLMN Number of Claims: 45

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 19428

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to the use of compounds to treat a number of conditions, such as thrombocytopenia, neutropenia or the delayed effects of radiation therapy. Compounds that can be used in the invention include methyl-2,3,4-trihydroxy-1-O-(7,17-dioxoandrost-5-ene-3 $\beta$ -yl)- $\beta$ -D-glucopyranosiduronate, 16 $\alpha$ ,3 $\alpha$ -dihydroxy-5 $\alpha$ -androstan-17-one or 3,7,16,17-tetrahydroxyandrost-5-ene, 3,7,16,17-tetrahydroxyandrost-4-ene, 3,7,16,17-tetrahydroxyandrost-1-ene or 3,7,16,17-tetrahydroxyandrostane that can be used in the treatment method.

SUMM . . . Morganella sp. (e.g., M. morganii), Mycobacterium sp. (e.g., M. avium, M. bovis, M. leprae, M. tuberculosis, M. pneumoniae. M. penetrans), Mycoplasma sp. (e.g., M. fermentans, M. penetrans, M. pneumoniae), Neisseria (e.g., N. gonorrhoeae, N. meningitidis), Nocardia asteroides, Proteus sp. (e.g., P. . . .

SUMM . . . prevented or ameliorated thus include infections by intracellular or extracellular gram positive bacteria, gram-negative bacteria, acid fast bacteria or by Mycoplasma. Other pathogens that are amenable to treatments according to the present invention are as described. See, e.g., J. B. Peter, . . .

SUMM . . . vertebrate host, e.g., human, mouse, bird, primate, or from other sources, e.g., insects (e.g., Drosophila), other invertebrates (e.g., yeast, bacteria, Mycoplasma sp., Plasmodium sp., Tetrahymena sp., C. elegans) or other organism groups or species listed herein or in the cited references.. . .

SUMM . . . of the formula 1 compounds on cells or tissues include (1) inhibition of one or more of bone resorption or calcium release or gp80, gp130, tumor necrosis factor (TNF), osteoclast differentiation factor (RANKL/ODF), RANKL/ODF receptor, IL-6 or IL-6 receptor expression or biological. . . .

SUMM . . . is (a) a DNA virus infection or an RNA virus infection (HSV, CMV, HBV, HCV, HIV, SHIV, SIV); (b) a Mycoplasma infection, a Listeria infection or a Mycobacterium infection; (c) extracellular bacteria infection; (d) fungal infection; (e) a yeast infection

(Candida, . . .  
SUMM . . . herpesvirus 8 infection, or a bacterial infection or a parasite  
infection, such as a malaria infection, Leishmaniasis,  
Cryptosporidiosis, Toxoplasmosis, a **Mycoplasma** infection, a  
Trichomonas infection, a Chlamydia infection, a Pneumocystis infection,  
a Salmonella infection, a Listeria infection, an Escherichia coli  
infection, . . .  
DETD . . . Fresh blood (Rh+) is used to isolate erythrocytes (RBC). Washed  
RBC are infected with schizonttrophozoite parasite stages (Palo Alto  
strain, **mycoplasma**-free). Stage specific parasites are  
isolated by the Percoll-mannitol method. Briefly, normal schizont-stage  
parasitized RBC (SPE) separated on Percoll-mannitol gradient  
(parasitemia. . .

L10 ANSWER 23 OF 39 USPATFULL on STN

AN 2003:100294 USPATFULL

TI 70 human secreted proteins

IN Ruben, Steven M., Olney, MD, UNITED STATES

Young, Paul E., Gaithersburg, MD, UNITED STATES

Brewer, Laurie A., St. Paul, MN, UNITED STATES

Ebner, Reinhard, Gaithersburg, MD, UNITED STATES

Olsen, Henrik S., Gaithersburg, MD, UNITED STATES

Florence, Kimberly A., Rockville, MD, UNITED STATES

Rosen, Craig A., Laytonsville, MD, UNITED STATES

Duan, Roxanne D., Bethesda, MD, UNITED STATES

Moore, Paul A., Germantown, MD, UNITED STATES

Shi, Yanggu, Gaithersburg, MD, UNITED STATES

LaFleur, David W., Washington, DC, UNITED STATES

Florence, Charles, Rockville, MD, UNITED STATES

Soppet, Daniel R., Centreville, VA, UNITED STATES

Endress, Gregory A., Florence, MA, UNITED STATES

Feng, Ping, Germantown, MD, UNITED STATES

Komatsoulis, George A., Silver Spring, MD, UNITED STATES

PA Human Genome Sciences, Inc., Rockville, MD (U.S. corporation)

PI US 2003069405 A1 20030410

US 2004014954 A9 20040122

US 6881823 B2 20050419

AI US 2002-144929 A1 20020515 (10)

RLI Continuation of Ser. No. US 2000-716128, filed on 17 Nov 2000, PENDING

Continuation of Ser. No. US 1999-251329, filed on 17 Feb 1999, ABANDONED

Continuation-in-part of Ser. No. WO 1998-US17044, filed on 18 Aug 1998,

UNKNOWN

PRAI US 1997-56369P 19970819 (60)

US 1997-56535P 19970819 (60)

US 1997-56556P 19970819 (60)

US 1997-56555P 19970819 (60)

US 1997-56726P 19970819 (60)

US 1997-56368P 19970819 (60)

US 1997-56728P 19970819 (60)

US 1997-56628P 19970819 (60)

US 1997-56629P 19970819 (60)

US 1998-89510P 19980616 (60)

US 1998-92956P 19980715 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 3

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 12259

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human secreted proteins and  
isolated nucleic acids containing the coding regions of the genes  
encoding such proteins. Also provided are vectors, host cells,  
antibodies, and recombinant methods for producing human secreted  
proteins. The invention further relates to diagnostic and therapeutic  
methods useful for diagnosing and treating disorders related to these  
novel human secreted proteins.

SUMM . . . activated Calcium permeability. Thus, it is likely that this

gene activates signal transduction pathways in myelogenous leukemia cells through intracellular **calcium release**. Binding of a ligand to a receptor is known to alter intracellular levels of small molecules, such as calcium, potassium, . . .

SUMM . . . and/or treatment of allergies caused by *Cladosporium herbarum*. Similarly, the tissue distribution in white blood cells, combined with the observed **calcium release** activity in myelogenous leukemia cells, indicates that polynucleotides and polypeptides corresponding to this gene are useful for the diagnosis and/or. . .

SUMM . . . Bacteroidaceae, Blastomycosis, Bordetella, Borrelia, Brucellosis, Candidiasis, Campylobacter, Coccidioidomycosis, Cryptococcosis, Dermatocycoses, Enterobacteriaceae (*Klebsiella*, *Salmonella*, *Serratia*, *Yersinia*), *Erysipelothrix*, *Helicobacter*, Legionellosis, Leptospirosis, *Listeria*, **Mycoplasmatales**, Neisseriaceae (e.g., *Acinetobacter*, *Gonorrhea*, *Menigococcal*), Pasteurellacea Infections (e.g., *Actinobacillus*, *Heamophilus*, *Pasteureila*), *Pseudomonas*, Rickettsiaceae, Chlamydiaceae, Syphilis, and Staphylococcal. These bacterial or. . .

L10 ANSWER 24 OF 39 USPATFULL on STN

AN 2003:93795 USPATFULL

TI Novel human genes and gene expression products I

IN Williams, Lewis T., Mill Valley, CA, UNITED STATES

Escobedo, Jaime, Alamo, CA, UNITED STATES

Innis, Michael A., Moraga, CA, UNITED STATES

Garcia, Pablo Dominguez, San Francisco, CA, UNITED STATES

Sudduth-Klinger, Julie, Kensington, CA, UNITED STATES

Reinhard, Christoph, Alameda, CA, UNITED STATES

Giese, Klaus, San Francisco, CA, UNITED STATES

Randazzo, Filippo, Emeryville, CA, UNITED STATES

Kennedy, Giulia C., San Francisco, CA, UNITED STATES

Pot, David, San Francisco, CA, UNITED STATES

Kassam, Atlatf, Oakland, CA, UNITED STATES

Lamson, George, Moraga, CA, UNITED STATES

Drmanac, Radoje, Palo Alto, CA, UNITED STATES

Crkvenjakov, Radomir, Sunnyvale, CA, UNITED STATES

Dickson, Mark, Hollister, CA, UNITED STATES

Drmanac, Snezana, Palo Alto, CA, UNITED STATES

Labat, Ivan, Sunnyvale, CA, UNITED STATES

Leshkowitz, Dena, Sunnyvale, CA, UNITED STATES

Kita, David, Foster City, CA, UNITED STATES

Garcia, Veronica, Sunnyvale, CA, UNITED STATES

Jones, Lee William, Sunnyvale, CA, UNITED STATES

Stache-Crain, Birgit, Sunnyvale, CA, UNITED STATES

PI US 2003065156 A1 20030403

AI US 2002-76555 A1 20020215 (10)

RLI Continuation of Ser. No. US 1998-217471, filed on 21 Dec 1998, PENDING

PRAI US 1997-68755P 19971223 (60)

US 1998-80664P 19980403 (60)

US 1998-105234P 19981021 (60)

DT Utility

FS APPLICATION

LREP BOZICEVIC, FIELD & FRANCIS LLP, 200 MIDDLEFIELD RD, SUITE 200, MENLO PARK, CA, 94025

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 15408

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to novel human polynucleotides and variants thereof, their encoded polypeptides and variants thereof, to genes corresponding to these polynucleotides and to proteins expressed by the genes. The invention also relates to diagnostic and therapeutic agents employing such novel human polynucleotides, their corresponding genes or gene products, e.g., these genes and proteins, including probes, antisense constructs, and antibodies.

DETD . . . . 0.00015

(strain turkey 1)

PROTEIN

MG328

	genomic segment			
	HOMOLOG>PIR2:S736			
	4 outer capsid			93
	MG328 homolog			
	protein (VP8*)			
	P01_orf1033 -			
	gene.			
	<b>Mycoplasma pneumoniae</b>			(ATCC
	29342)			(SGC3) >
	GP:MPAE0000			35_2
	<b>Mycoplasma</b>			pneumon
	iae from bases			442306
	to 452472			(sectio
	n 35 of 63) of the			complet
	e genome;			MG328
	homolog,			
63	D63139	Aeromonas sp.	1. . .	1
DETD		alpha-trypsin		protein
	alpha form-			
	inhibitor light			
	bullfrog>GP:D21070_1			
	chain (ITI) gene,			Rana
	catesbeiana mRNA			for
	exon 1.			muscle
	bullfrog skeletal			channel
	<b>calcium release</b>			recepto
	(ryanodine			isoform
	r) alpha			cds;
	(RyR1), complete			alpha
	Ryanodine receptor			
	isoform			
227	Z92851	Caenorhabditis	0.082	CYA7_BOVIN
	ADENYLATE	0.3		
	elegans DNA ***.			
DETD				
	HYPOTHETICAL 33.0	0.0008		
	L-epinephrine			KD
	PROTEIN IN LICA			
	transporter			3'
	REGION (ORF			
	mRNA, complete			
	R6)>PIR2:S42125			
	cds.			
	hypothetical protein 3 -			
	<b>coplasma capricolum</b>			My
	GP:MYCRPM			(SGC3) >
	capricolum			H_6 M;
	rnnpA and lica			rpmH,
	Orf R6			gene;

241 L39891 Homo sapiens 0.04 MUC2\_HUM MUCIN 2  
5.90E-05

L10 ANSWER 25 OF 39 USPATFULL on STN

AN 2003:86817 USPATFULL

TI Immune modulation method using steroid compounds

IN Ahlem, Clarence N., San Diego, CA, UNITED STATES

Frincke, James M., San Diego, CA, UNITED STATES

dos Anjos de Carvalho, Luis Daniel, Paio Pires, PORTUGAL

Heggie, William, Palmela, PORTUGAL

Prendergast, Patrick T., County Kildare, IRELAND

Reading, Christopher L., San Diego, CA, UNITED STATES

Thadikonda, Krupakar Paul, Gaithersburg, MD, UNITED STATES

Vernon, Russell N., Oak Hills, CA, UNITED STATES

PI US 2003060425 A1 20030327

AI US 2001-820483 A1 20010329 (9)

RLI Continuation-in-part of Ser. No. US 1999-449184, filed on 24 Nov 1999,  
ABANDONED Continuation-in-part of Ser. No. US 1999-414905, filed on 8  
Oct 1999, ABANDONED Continuation-in-part of Ser. No. US 1999-449004,  
filed on 24 Nov 1999, ABANDONED Continuation-in-part of Ser. No. US  
2000-535675, filed on 23 Mar 2000, PENDING Continuation-in-part of Ser.  
No. US 1999-449042, filed on 24 Nov 1999, ABANDONED Continuation-in-part  
of Ser. No. US 2000-675470, filed on 28 Sep 2000, PENDING  
Continuation-in-part of Ser. No. US 2000-586673, filed on 1 Jun 2000,  
ABANDONED Continuation-in-part of Ser. No. US 2000-586672, filed on 1  
Jun 2000, ABANDONED Continuation-in-part of Ser. No. US 1999-461026,  
filed on 15 Dec 1999, ABANDONED

PRAI US 1998-109924P 19981124 (60)

US 1999-140028P 19990616 (60)

US 1998-109923P 19981124 (60)

US 1999-126056P 19991019 (60)

US 1999-124087P 19990311 (60)

US 1998-110127P 19981127 (60)

US 1999-161453P 19991025 (60)

US 1999-145823P 19990727 (60)

US 1999-137745P 19990603 (60)

US 1998-112206P 19981215 (60)

US 2000-257071P 20001220 (60)

DT Utility

FS APPLICATION

LREP HOLLIS-EDEN PHARMACEUTICALS, INC., 4435 EASTGATE MALL, SUITE 400, SAN  
DIEGO, CA, 92121

CLMN Number of Claims: 54

ECL Exemplary Claim: 1

DRWN 6 Drawing Page(s)

LN.CNT 14708

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides compositions comprising formula 1 steroids, e.g.,  
16 $\alpha$ -bromo-3  $\beta$ -hydroxy-5 $\alpha$ -androstan-17-one hemihydrate  
and one or more excipients, including compositions that comprise a  
liquid formulation comprising less than about 3% v/v water. The  
compositions are useful to make improved pharmaceutical formulations.  
The invention also provides methods of intermittent dosing of steroid  
compounds such as analogs of 16 $\alpha$ -bromo-3 $\beta$ -hydroxy-5 $\alpha$ -  
androstan-17-one and compositions useful in such dosing regimens. The  
invention further provides compositions and methods to inhibit pathogen  
replication, ameliorate symptoms associated with immune dysregulation  
and to modulate immune responses in a subject using the compounds. The  
invention also provides methods to make and use these immunomodulatory  
compositions and formulations.

DETD . . . isospora, cryptococci, cryptosporidia (*Cryptosporidium parvum*),  
*Mycobacterium* sp. (e.g., *M. avium*, *M. bovis*, *M. leprae*, *M. tuberculosis*,  
*M. pneumoniae*, *M. penetrans*), *Mycoplasma* sp. (e.g., *M.*  
*fermentans*, *M. penetrans*, *M. pneumoniae*), *Trypanosoma* sp. (e.g., *T.*  
*brucei*, *T. gambiense*, *T. cruzi*, *T. evansi*), *Leishmania*. . .

DETD . . . be treated, prevented or ameliorated thus include infections by  
intracellular or extracellular gram positive bacteria, gram negative  
bacteria or by *Mycoplasma*. Other pathogens that are amenable

to treatments according to the present invention are as described. See, e.g., J. B. Peter, . . .

DETD . . . vertebrate host, e.g., human, mouse, bird, primate, or from other sources, e.g., insects (e.g., *Drosophila*), other invertebrates (e.g., yeast, bacteria, *Mycoplasma* sp., *Plasmodium* sp., *Tetrahymena* sp., *C. elegans*) or other organism groups or species listed herein or in the cited references. . . .

DETD . . . of the formula 1 compounds on cells or tissues include (1) inhibition of one or more of bone resorption or calcium release or gp80, gp130, tumor necrosis factor (TNF), osteoclast differentiation factor (RANKL/ODF), RANKL/ODF receptor, IL-6 or IL-6 receptor expression or biological. . . .

DETD . . . is (a) a DNA virus infection or an RNA virus infection (HSV, CMV, HBV, HCV, HIV, SHIV, SIV); (b) a *mycoplasma* infection, a *Listeria* infection or a *Mycobacterium* infection; (c) extracellular bacteria infection; (d) fungal infection; (e) a yeast infection (*Candida*, . . .

DETD . . . herpesvirus 8 infection, or a bacterial infection or a parasite infection, such as a malaria infection, leishmaniasis, cryptosporidiosis, toxoplasmosis, a *mycoplasma* infection, a *Trichomonas* infection, a *Chlamydia* infection, a *Pneumocystis* infection, a *Salmonella* infection, a *Listeria* infection, an *Escherichia coli* infection, . . .

DETD . . . Fresh blood (Rh+) is used to isolate erythrocytes (RBC). Washed RBC are infected with schizont/trophozoite parasite stages (Palo Alto strain, *mycoplasma*-free). Stage specific parasites are isolated by the Percoll-mannitol method. Briefly, normal schizont-stage parasitized RBC (SPE) separated on Percoll-mannitol gradient (parasitemia. . . .

CLM What is claimed is:

. . . any combination of the foregoing is selected from (a) a DNA virus infection or an RNA virus infection; (b) a *mycoplasma* infection, a *Listeria* infection or a *Mycobacterium* infection; (c) a *Streptococcus* infection, a *Staphylococcus* infection, a *Vibrio* infection, a *Salmonella*. . . .

L10 ANSWER 26 OF 39 USPATFULL on STN

AN 2003:79074 USPATFULL

TI Immune-enhancing peptides

IN Bae, Hyun-Joo, Daegu, KOREA, REPUBLIC OF  
Bae, Yoe-Sik, Koryung-gun, KOREA, REPUBLIC OF  
Kim, Youn-Dong, Pohang-si, KOREA, REPUBLIC OF  
Cho, Eun-Jung, Pusan, KOREA, REPUBLIC OF  
Kim, Jong-In, Pohang-si, KOREA, REPUBLIC OF  
Lee, Tae-Hoon, Pohang-si, KOREA, REPUBLIC OF  
Suh, Pann-Ghill, Pohang-si, KOREA, REPUBLIC OF  
Ryu, Sung Ho, Pohang-si, KOREA, REPUBLIC OF

PI US 2003055001 A1 20030320

AI US 2002-186035 A1 20020628 (10)

PRAI US 2001-302744P 20010703 (60)

DT Utility

FS APPLICATION

LREP David A. Einhorn, Esq., Anderson Kill & Olick, P.C., 1251 Avenue of the Americas, New York, NY, 10020

CLMN Number of Claims: 86

ECL Exemplary Claim: 1

DRWN 10 Drawing Page(s)

LN.CNT 1619

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are peptides having SEQ ID NOs: 1 to 32 that can stimulate superoxide generation in human monocytes. Superoxide is the most important armory on the primary defense line of monocytes against invading pathogens, and the identification of new stimuli and the characterization of the regulatory mechanism of superoxide generation are of paramount importance.

DETD . . . whose complete amino acid sequences comprise SEQ ID NO: 1 to SEQ ID NO: 32. The condition may be bacterial, *mycoplasma*, yeast, fungal, or viral infection or inflammation.

DETD [0082] Next, the effects of HFYLPm, MFYLPm, and HFYLPm on intracellular



**calcium release** in several non-leukocytic cell lines were examined. NIH3T3 (NIH Swiss mouse embryo fibroblast), 3Y1 (Rat embryonic fibroblast), 3T3L1 (preadipocyte), and. . .

CLM

What is claimed is:

21. The method according to claim 19 wherein the condition is bacterial, **Mycoplasma**, yeast, fungal, or viral infection.

22. The method according to claim 20 wherein the condition is bacterial, **mycoplasma**, yeast, fungal, or viral infection.

L10 ANSWER 27 OF 39 USPATFULL on STN

AN 2003:31083 USPATFULL

TI p27 (Kip1) -FKBP-12 protein complexes

IN Nandabalan, Krishnan, Guilford, CT, UNITED STATES

Yang, Meijia, East Lyme, CT, UNITED STATES

PI US 2003023034 A1 20030130

AI US 2001-970561 A1 20011003 (9)

RLI Continuation of Ser. No. US 1998-99857, filed on 18 Jun 1998, ABANDONED

DT Utility

FS APPLICATION

LREP MINTZ, LEVIN, COHN, FERRIS,, GLOVSKY AND POPEO, P.C., One Financial Center, Boston, MA, 02111

CLMN Number of Claims: 65

ECL Exemplary Claim: 1

DRWN 3 Drawing Page(s).

LN.CNT 4264

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is directed to complexes of the protein p27(Kip1) with proteins identified as interacting with p27(Kip1) by a yeast mating test. Specifically, the present invention is directed to complexes with p27(Kip1) and FKBP-12. The present invention is also directed to complexes of a derivative, fragment or analog of p27(Kip1) and a derivative, fragment or analog of FKBP-12. Methods of screening the complexes for efficacy in treating and/or preventing certain diseases and disorders, particularly hyperproliferative disorders, including cancer, neurodegenerative disease, autoimmune disease, are also provided.

SUMM . . . & Wiederrecht, 1996, Ann. Rev. 1 mm. 14:483-510. FKBP-12 was also found to be an integral component of the intracellular **calcium-release** channel complex and can modulate the function of these channels by effecting the channel gating. Brillantes et al., 1994, Cell. . .

DETD . . . non-Hodgkin's lymphoma  
Hodgkin's disease  
drug-induced  
alpha methyl dopa  
penicillin type  
quinidine type  
post-viral infections  
tumors (rare)  
cold agglutinin diseases  
acute  
mycoplasma infection  
infectious mononucleosis  
chronic  
idiopathic lymphoma  
paroxysmal cold hemoglobinuria  
autoimmune thrombocytopenic purpura  
idiopathic  
drug-induced  
autoimmune neutropenia  
Neuromuscular  
myasthenia gravis  
acute. . .

DETD . . . The immunosuppressant FK506 selectively interacts with and inhibits a calcium-dependent serine-threonine phosphatase function after binding to FKBP-12. This phosphatase modulates **calcium release** in skeletal and cardiac muscles. Thus, a complexe or

protein of the present invention can be screened by measuring its. . .

L10 ANSWER 28 OF 39 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation on STN  
AN 2003:690136 SCISEARCH  
GA The Genuine Article (R) Number: 708JF  
TI Structures of immunophilins and their ligand complexes  
AU Dornan J; Taylor P; Walkinshaw M D (Reprint)  
CS Univ Edinburgh, Michael Swann Bldg, Kings Bldg, Edinburgh EH9 3JR, Midlothian, Scotland (Reprint); Univ Edinburgh, Edinburgh EH9 3JR, Midlothian, Scotland; Cyclacel Ltd, Dundee DD1 5JJ, Scotland  
CYA Scotland  
SO CURRENT TOPICS IN MEDICINAL CHEMISTRY, (2003) Vol. 3, No. 12, pp. 1392-1409.  
ISSN: 1568-0266.  
PB BENTHAM SCIENCE PUBL LTD, PO BOX 1673, 1200 BR HILVERSUM, NETHERLANDS.  
DT General Review; Journal  
LA English  
REC Reference Count: 106  
ED Entered STN: 29 Aug 2003  
Last Updated on STN: 29 Aug 2003  
\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*  
AB This review includes an analysis of available X-ray and NMR structures of both members of the immunophilin family; cyclophilins and the FK-506 binding proteins (FKBPs). Available structures are compared and contrasted to highlight different structural features seen both within and between species. Each immunophilin family has been structurally characterised with a variety of small molecule ligands, principally immunosuppressive drugs and their analogues and an overview of these complexes is also presented. Currently the Protein Data Base contains over 60 entries for cyclophilins and over 40 entries for FKBPs. A number of FKBP related structures are also available including structures of MIP (Macrophage Infectivity Potentiator protein) from Legionella pneumophila and Trypanosoma cruzi and Trigger Factor from Mycoplasma genitalium. For all structures discussed in the review a summary of the available biological data is also presented.  
AB . . . also available including structures of MIP (Macrophage Infectivity Potentiator protein) from Legionella pneumophila and Trypanosoma cruzi and Trigger Factor from Mycoplasma genitalium. For all structures discussed in the review a summary of the available biological data is also presented.  
STP KeyWords Plus (R): HUMAN CYCLOPHILIN-A; X-RAY-STRUCTURE; PROLYL CIS/TRANS ISOMERASE; DISULFIDE BOND FORMATION; **CALCIUM-RELEASE** CHANNEL; NMR SOLUTION STRUCTURE; CIS-TRANS ISOMERASES; DRUG CYCLOSPORINE-A; CRYSTAL-STRUCTURE; ESCHERICHIA-COLI  
  
L10 ANSWER 29 OF 39 USPATFULL on STN  
AN 2002:270385 USPATFULL  
TI Use of intracellular calcium chelators to increase surfactant secretion in the lungs  
IN Strayer, David S., Newtown Square, PA, UNITED STATES  
PI US 2002148463 A1 20021017  
US 6797728 B2 20040928  
AI US 2001-45904 A1 20011107 (10)  
PRAI US 2000-246616P 20001108 (60)  
DT Utility  
FS APPLICATION  
LREP THOMAS JEFFERSON UNIVERSITY, INTELLECTUAL PROPERTY DIVISION, 1020 WALNUT STREET, SUITE 620, PHILADELPHIA, PA, 19107  
CLMN Number of Claims: 14  
ECL Exemplary Claim: 1  
DRWN 12 Drawing Page(s)  
LN.CNT 1134  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Pulmonary surfactant is required in order to reduce surface tension in the lungs so that less effort is needed to reinflate the lungs after exhalation. A number of diseases and conditions exist that disrupt the normal flow of surfactant secretion, resulting in respiratory distress or failure. The present invention provides a method of treating a

patient in respiratory distress syndrome wherein a surfactant deficiency has occurred, thereby restoring a normal respiratory function.

SUMM . . . and IP3 receptors (IP3R) are examples of proteins that traverse the ER membrane and release Ca.sup.2+ on binding their ligands. **Calcium release** (or increased [Ca.sup.2+].sub.i) may activate tyrosine-specific protein kinases and calmodulin-dependent kinases. (Sugden, et al, Cell. Signal. 9:337-351, 1997). Again, however, . . .

SUMM [0015] Downstream signaling that follows **calcium release** from stores is an area of intense investigation. In type II cells, **calcium release** activates cell membrane calcium channels, allowing influx of Ca.sup.2+. (Berridge, M J, Nature 361:315-325, 1993; Putney, J W, Jr., Science, . . .

DETD . . . where the infectious agent is a multicellular organism; pneumonitis or pneumonia due to infectious agents where the infectious agent is **mycoplasma**; pneumonitis or pneumonia due to infectious agents where the infectious agent is *Pneumocystis carinii*; toxic pneumonitis; toxic pneumonitis where the . . .

DETD [0096] ATP, terbutaline, Io and TG all elicit biphasic increases in [Ca.sup.2+].sub.i, reflecting both **calcium release** and calcium influx. (Strayer, et al, Rec. Signal Transd. 7: 111-120, 1997). SP-A, acting through its type II cell membrane. . .

DETD . . . is triggered by a decrease in the free calcium ([Ca.sup.2+].sub.l) and/or bound calcium in the ER. Alternatively, the process of **calcium release**, rather than the consequent decrease in [Ca.sup.2+].sub.l, causes secretion.

DETD . . . 1997). Still, these data imply that PMA activates secretion either via a different signaling mechanism or, less likely, distal to **calcium release** in the pathway activated by calcium-releasing secretagogues.

L10 ANSWER 30 OF 39 USPATFULL on STN

AN 2002:221354 USPATFULL

TI Method for identifying substances which positively influence inflammatory conditions of chronic inflammatory airway diseases

IN Jung, Birgit, Schwabenheim, GERMANY, FEDERAL REPUBLIC OF  
Kraut, Norbert, Eberhardzell, GERMANY, FEDERAL REPUBLIC OF  
Mueller, Stefan, Mainz, GERMANY, FEDERAL REPUBLIC OF  
Kistler, Barbara, Pfungstadt, GERMANY, FEDERAL REPUBLIC OF  
Seither, Peter, Rissege Halde, GERMANY, FEDERAL REPUBLIC OF  
Quast, Karsten, Schemmerberg, GERMANY, FEDERAL REPUBLIC OF  
Weith, Andreas, Eberhardzell, GERMANY, FEDERAL REPUBLIC OF

PI US 2002119494 A1 20020829  
US 6773895 B2 20040810  
AI US 2001-944807 A1 20010831 (9)  
PRAI GB 2000-21484 20000901  
US 2000-233748P 20000919 (60)

DT Utility

FS APPLICATION

LREP BOEHRINGER INGELHEIM CORPORATION, 900 RIDGEBURY ROAD, P. O. BOX 368, RIDGEFIELD, CT, 06877

CLMN Number of Claims: 64

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 2302

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to substances which modulate receptors involved in inflammatory processes and whose modulated functions positively influence inflammatory diseases.

DETD . . . are synthesized by 15-lipoxygenase (Kim, S. J., 1988, Biochem. Biophys Res. Commun. 150:870-876). Lipoxin A.sub.4 (LXA.sub.4) stimulates chemotaxis, adherence and **calcium release** in monocytes. In neutrophils, though, LXA.sub.4 inhibits chemotaxis and adhesion, and downregulates transmigration through epithelial cells (Maddox, J. F. and. . .

DETD . . . plates. Cells are maintained in a humidified atmosphere with 5% CO.sub.2 at 37° C. and tested regularly for contamination by **mycoplasma**.

DETD . . . All cells are maintained in a humidified atmosphere with 5%

CO.sub.2 at 37° C. and tested regularly for contamination by  
**mycoplasma**.

L10 ANSWER 31 OF 39 USPATFULL on STN  
AN 2002:191539 USPATFULL  
TI Full-length human cDNAs encoding potentially secreted proteins  
IN Milne Edwards, Jean-Baptiste Dumas, Paris, FRANCE  
Bougueleret, Lydie, Petit Lancy, SWITZERLAND  
Jobert, Severin, Paris, FRANCE  
PI US 2002102604 A1 20020801  
AI US 2000-731872 A1 20001207 (9)  
PRAI US 1999-169629P 19991208 (60)  
US 2000-187470P 20000306 (60)  
DT Utility  
FS APPLICATION  
LREP John Lucas, Ph.D., J.D., Genset Corporation, 10665 Sorento Valley Road,  
San Diego, CA, 92121-1609  
CLMN Number of Claims: 29  
ECL Exemplary Claim: 1  
DRWN 5 Drawing Page(s)  
LN.CNT 28061

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention concerns GENSET polynucleotides and polypeptides. Such  
GENSET products may be used as reagents in forensic analyses, as  
chromosome markers, as tissue/cell/organelle-specific markers, in the  
production of expression vectors. In addition, they may be used in  
screening and diagnosis assays for abnormal GENSET expression and/or  
biological activity and for screening compounds that may be used in the  
treatment of GENSET-related disorders.

DETD . . . calmodulin, immunophilins (FK506 binding proteins), and in  
skeletal muscle the dihydropyridine receptor. The RyR from skeletal  
muscle is the major **calcium release** channel for that  
tissue, and the most intensively studied of the three genetic isoforms  
detected thus far in mammalian species.. . .

DETD . . . gram-negative enterobacterium including shigella, salmonella,  
and campylobacter, pseudomonas, vibrio, brucella, francisella, yersinia,  
bartonella, norcardium, actinomyces, mycobacterium, spirochaetale,  
rickettsia, chlamydia, and **mycoplasma**; infections by fungal  
agents classified as aspergillus, blastomyces, dermatophytes,  
cryptococcus, coccidioides, malassezia, histoplasma, and other fungal  
agents causing various mycoses;. . .

L10 ANSWER 32 OF 39 USPATFULL on STN  
AN 2002:143942 USPATFULL  
TI Methods of stimulating the immune system with anti-CD3 antibodies  
IN Bluestone, Jeffery A., Chicago, IL, United States  
PA Tolerance Therapeutics, Inc., Chicago, IL, United States (U.S.  
corporation)  
PI US 6406696 B1 20020618  
AI US 1995-459486 19950602 (8)  
RLI Continuation of Ser. No. US 1994-286805, filed on 5 Aug 1994, now  
patented, Pat. No. US 6113901 Continuation of Ser. No. US 1992-990553,  
filed on 14 Dec 1992, now abandoned Continuation of Ser. No. US  
1990-524304, filed on 16 May 1990, now abandoned Continuation of Ser.  
No. US 1989-429729, filed on 27 Oct 1989, now abandoned

DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Gambel, Phillip  
LREP Fulbright & Jaworski, LLP  
CLMN Number of Claims: 16  
ECL Exemplary Claim: 1  
DRWN 37 Drawing Figure(s); 15 Drawing Page(s)  
LN.CNT 2913

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are immunopotentiating agents, and vaccines thereof, which  
enhance and/or otherwise modify immune responses, and method for their  
preparation and use in vivo. Immunopotentiating agents can be single  
agents that act directly, adjuvants added concurrently with the agents,  
or heteroconjugates wherein the immunopotentiating agent is chemically

coupled to the compound against which an immune response is desired. Examples of immunopotentiating agents include monoclonal antibodies, such as anti-CD3, anti-CD2) and anti-CD5 antibodies, and proteins derived from microorganisms (e.g., enterotoxins) which activate T cells. The compounds against which an immune response can be generated, which may be the second component in a heteroconjugate, include compound from abnormal or diseased tissues such as tumors, or infectious agents, such as viruses, bacteria, fungi, protozoal or metazoal parasites, and can be obtained by natural or recombinant means. The stimulation of the mammalian immune system using immunopotentiating agents alone is particularly disclosed.

SUMM . . . is not limited to, increased cell proliferation and DNA synthesis, lymphokine and cytotoxic cell production, a rapid rise in intracellular **calcium**, **release** of water soluble inositol phosphates, increased IL-2 receptor expression, enhanced proliferative response to IL-2, and enhanced responses to foreign antigens. . . .

SUMM . . . such as staphylococcal enterotoxins A, C.sub.1, C.sub.2, D, E, toxic shock syndrome toxin (TSST), exfoliating toxin (ExFT) and likely even **mycoplasma** arthritidis substance, will find similar utility.

DETD . . . as these can be readily employed to screen for and identify other suitable immunopotentiating agents such as immunopotentiating bacterial or **mycoplasma** proteins. Furthermore, assays such as these can be employed as an initial step in the determination of appropriate dosages in. . . .

CLM What is claimed is:

. . . as characterized by increased cell proliferation and DNA synthesis, lymphokine and cytotoxic T cell production, a rapid rise in intracellular **calcium**, **release** of water soluble inositol phosphates, increased IL-2 receptor expression, enhanced proliferative response to IL-2, and enhanced response to foreign antigens.

L10 ANSWER 33 OF 39 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on  
STN DUPLICATE 1

AN 2002:296991 BIOSIS

DN PREV200200296991

TI **Mycoplasma** hyopneumoniae increases intracellular **calcium**  
**release** in porcine ciliated tracheal cells.

AU Park, Seung-Chun; Yibchok-Anun, Sirintorn; Cheng, Henrique; Young, Theresa  
F.; Thacker, Eileen L.; Minion, F. Chris; Ross, Richard F.; Hsu, Walter H.  
[Reprint author]

CS Department of Biomedical Sciences, Iowa State University, Ames, IA, 50011,  
USA  
whsu@iastate.edu

SO Infection and Immunity, (May, 2002) Vol. 70, No. 5, pp. 2502-2506. print.  
CODEN: INFIBR. ISSN: 0019-9567.

DT Article

LA English

ED Entered STN: 15 May 2002

Last Updated on STN: 15 May 2002

AB We investigated the effects of intact pathogenic **Mycoplasma**  
**hyopneumoniae**, nonpathogenic **M. hyopneumoniae**, and **Mycoplasma**  
**flocculare** on intracellular free  $\text{Ca}^{2+}$  concentrations ( $(\text{Ca}^{2+})_i$ ) in porcine  
ciliated tracheal epithelial cells. The ciliated epithelial cells had  
basal  $(\text{Ca}^{2+})_i$  of  $103 \pm 3$  nM ( $n = 217$  cells). The  $(\text{Ca}^{2+})_i$  increased by  
 $250 \pm 19$  nM ( $n = 47$  cells) from the basal level within 100 s of the  
addition of pathogenic **M. hyopneumoniae** strain 91-3 (300 mug/ml), and this  
increase lasted approx 60 s. In contrast, nonpathogenic **M. hyopneumoniae**  
and **M. flocculare** at concentrations of 300 mug/ml failed to increase  
 $(\text{Ca}^{2+})_i$ . In  $\text{Ca}^{2+}$ -free medium, pathogenic **M. hyopneumoniae** still increased  
 $(\text{Ca}^{2+})_i$  in tracheal cells. Pretreatment with thapsigargin (1 muM for 30  
min), which depleted the  $\text{Ca}^{2+}$  store in the endoplasmic reticulum,  
abolished the effect of **M. hyopneumoniae**. Pretreatment with pertussis  
toxin (100 ng/ml for 3 h) or U-73122 (2 muM for 100 s), an inhibitor of  
phospholipase C, also abolished the effect of **M. hyopneumoniae**. The  
administration of mastoparan 7, an activator of pertussis toxin-sensitive

proteins Gi and Go, increased (Ca2+)i in ciliated tracheal cells. These results suggest that pathogenic M. hyopneumoniae activates receptors that are coupled to Gi or Go, which in turn activates a phospholipase C pathway, thereby releasing Ca2+ from the endoplasmic reticulum. Thus, an increase in Ca2+ may serve as a signal for the pathogenesis of M. hyopneumoniae.

TI **Mycoplasma** hyopneumoniae increases intracellular calcium release in porcine ciliated tracheal cells.

AB We investigated the effects of intact pathogenic **Mycoplasma** hyopneumoniae, nonpathogenic M. hyopneumoniae, and **Mycoplasma** flocculare on intracellular free Ca2+ concentrations ((Ca2+)i) in porcine ciliated tracheal epithelial cells. The ciliated epithelial cells had basal (Ca2+)i. . . .

IT . . . .

IT System (Respiration); Toxicology

IT Parts, Structures, & Systems of Organisms  
ciliated tracheal epithelial cell: respiratory system; endoplasmic reticulum

IT Diseases  
**mycoplasma** pneumonia: bacterial disease, respiratory system disease, immunology  
Pneumonia, **Mycoplasma** (MeSH)

IT Chemicals & Biochemicals  
Gi-coupled receptor: activation; Go-coupled receptor: activation;  
U-73122: enzyme inhibitor; calcium(II) ion: intracellular, pathogenesis signal, release,. . . .

ORGN Classifier  
**Mycoplasmataceae** 07512  
Super Taxa  
**Mycoplasmatales; Mycoplasmas; Eubacteria; Bacteria;**  
Microorganisms  
Organism Name  
**Mycoplasma flocculare**  
**Mycoplasma** hyopneumoniae: non-pathogenic, pathogen, strain-91-3  
Taxa Notes  
Bacteria, Eubacteria, Microorganisms

ORGN Classifier  
Suidae 85740  
Super Taxa  
Artiodactyla; Mammalia; Vertebrata; Chordata; Animalia

L10 ANSWER 34 OF 39 USPATFULL on STN

AN 2000:149718 USPATFULL

TI Methods of promoting immunopotential and preparing antibodies with anti-CD3 antibodies

IN Bluestone, Jeffery A., Chicago, IL, United States

PA Arch Development Corporation, Chicago, IL, United States (U.S. corporation)

PI US 6143297 20001107

AI US 1995-458462 19950602 (8)

RLI Division of Ser. No. US 1994-286805, filed on 5 Aug 1994 And a continuation of Ser. No. US 1992-990553, filed on 14 Dec 1992, now abandoned which is a continuation of Ser. No. US 1990-524304, filed on 16 May 1990, now abandoned which is a continuation of Ser. No. US 1989-429729, filed on 27 Oct 1989, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Chan, Christina Y.; Assistant Examiner: Gambel, Phillip

LREP Fulbright & Jaworski

CLMN Number of Claims: 27

ECL Exemplary Claim: 1

DRWN 18 Drawing Figure(s); 15 Drawing Page(s)

LN.CNT 3008

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are immunopotentiating agents, and vaccines thereof, which enhance and/or otherwise modify immune responses, and method for their preparation and use in vivo. Immunopotentiating agents can be single

agents that act directly, adjuvants added concurrently with the agents, or heteroconjugates wherein the immunopotentiating agent is chemically coupled to the compound against which an immune response is desired. Examples of immunopotentiating agents include monoclonal antibodies, such as anti-CD3, anti-CD2) and anti-CD5 antibodies, and proteins derived from microorganisms (e.g., enterotoxins) which activate T cells. The compounds against which an immune response can be generated, which may be the second component in a heteroconjugate, include compound from abnormal or diseased tissues such as tumors, or infectious agents, such as viruses, bacteria, fungi, protozoal or metazoal parasites, and can be obtained by natural or recombinant means. Methods of using the invention to prepare monoclonal antibodies are particularly disclosed.

SUMM . . . is not limited to, increased cell proliferation and DNA synthesis, lymphokine and cytotoxic cell production, a rapid rise in intracellular calcium, release of water soluble inositol phosphates, increased IL-2 receptor expression, enhanced proliferative response to IL-2, and enhanced responses to foreign antigens. . . .

SUMM . . . such as staphylococcal enterotoxins A, C.sub.1, C.sub.2, D, E, toxic shock syndrome toxin (TSST), exfoliating toxin (ExFT) and likely even mycoplasma arthritidis substance, will find similar utility.

DETD . . . as these can be readily employed to screen for and identify other suitable immunopotentiating agents such as immunopotentiating bacterial or mycoplasmal proteins. Furthermore, assays such as these can be employed as an initial step in the determination of appropriate dosages in. . . .

L10 ANSWER 35 OF 39 USPATFULL on STN

AN 2000:117282 USPATFULL

TI Methods of stimulating or enhancing the immune system with anti-CD3 antibodies

IN Bluestone, Jeffery A., Chicago, IL, United States

PA Arch Development Corporation, Chicago, IL, United States (U.S. corporation)

PI US 6113901 20000905

AI US 1994-286805 19940805 (8)

RLI Continuation of Ser. No. US 1992-990553, filed on 14 Dec 1992, now abandoned which is a continuation of Ser. No. US 1990-524304, filed on 16 May 1990, now abandoned which is a continuation-in-part of Ser. No. US 1989-429729, filed on 27 Oct 1989, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Chan, Christina Y.; Assistant Examiner: Gambel, Phillip

LREP Arnold White & Durkee

CLMN Number of Claims: 17

ECL Exemplary Claim: 1

DRWN 18 Drawing Figure(s); 15 Drawing Page(s)

LN.CNT 2944

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are immunopotentiating agents, and vaccines thereof, which enhance and/or otherwise modify immune responses, and methods for their preparation and use in vivo. Immunopotentiating agents can be single agents that act directly, adjuvants added concurrently with the agents, or preferably, heteroconjugates wherein the immunopotentiating agent is chemically coupled to the compound against which an immune response is desired. Examples of immunopotentiating agents include monoclonal antibodies and proteins derived from microorganisms (e.g., enterotoxins) which activate T cells. The compounds against which an immune response can be generated, which may be the second component in a heteroconjugate, include compounds from abnormal or diseased tissues such as tumors, or infectious agents, such as viruses, bacteria, fungi, protozoal or metazoal parasites, and can be obtained by natural or recombinant means. Also disclosed is the use of monoclonal antibodies such as anti-CD3 antibodies or T cells, prepared from mammals whose immune systems have responded to administration of a heteroconjugate, in the induction of passive immunity.

SUMM . . . is not limited to, increased cell proliferation and DNA

synthesis, lymphokine and cytotoxic cell production, a rapid rise in intracellular **calcium**, **release** of water soluble inositol phosphates, increased IL-2 receptor expression, enhanced proliferative response to IL-2, and enhanced responses to foreign antigens. . . .

SUMM . . . such as staphylococcal enterotoxins A, C.sub.1, C.sub.2, D, E, toxic shock syndrome toxin (TSST), exfoliating toxin (ExFT) and likely even **mycoplasma** arthritis substance, will find similar utility.

DETD . . . as these can be readily employed to screen for and identify other suitable immunopotential agents such as immunopotentiating bacterial or **mycoplasma** proteins. Furthermore, assays such as these can be employed as an initial step in the determination of appropriate dosages in. . . .

L10 ANSWER 36 OF 39 USPTAFULL on STN

AN 95:40845 USPTAFULL

TI Diagnosis for malignant hyperthermia

IN Worton, Ronald G., Toronto, Canada

MacLennan, David H., Toronto, Canada

Britt, Beverley A., Etobicoke, Canada

PA The University of Toronto Innovations Foundation, Toronto, Canada  
(non-U.S. corporation)

HSC Research and Development Limited Partnership, Toronto, Canada  
(non-U.S. corporation)

The Toronto Hospital, Toronto, Canada (non-U.S. corporation)

PI US 5413907 19950509

WO 9104328 19910404

AI US 1992-842396 19920413 (7)

WO 1990-CA312 19900921

19920413 PCT 371 date

19920413 PCT 102(e) date

PRAI CA 1989-612726 19890925

DT Utility

FS Granted

EXNAM Primary Examiner: Parr, Margaret; Assistant Examiner: Horlick, Kenneth

LREP Bell, Seltzer, Park & Gibson

CLMN Number of Claims: 4

ECL Exemplary Claim: 1

DRWN 43 Drawing Figure(s); 41 Drawing Page(s)

LN.CNT 1045

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for isolating a cDNA specific for the human ryanodine receptor is disclosed. The gene is associated with malignant hyperthermia, a hypermetabolic syndrome triggered primarily by inhalation anesthetics. The cDNA can be cloned and expressed in a recombinant plasmid or phage. The cDNA, or fragments thereof, is used as diagnostic probes for individuals at risk for malignant hyperthermia using restriction fragment length polymorphism analysis. The cDNA is that sequenced in FIG. 2 of this specification.

DETD . . . disease may be related to the release of calcium into the muscle cell cytoplasm from the sarcoplasmic reticulum (SR). The **calcium release** channel in muscle is a large protein that spans the gap between a membranous structure called the transverse tubule and. . . .

DETD . . . appears to function normally in both human and pig MH muscle, several studies indicated a defect in the calcium induced **calcium release** channel.

DETD The resting level of calcium is elevated in the **mycoplasma** of MH muscle while other reports indicate that calcium induced **calcium release** is activated at a lower calcium threshold in heavy SR isolated from MH pigs than in heavy SR isolated from. . . . Physiological society C358-367, (1989) reported that muscle from MH sensitive (MHS) pigs has a significantly higher rate of calcium induced **calcium release** than normal. Mickelson et al (J. Biol. Chem. 264: 1715-1722, 1988) also showed an increased rate of calcium induced **calcium release** in MHS muscle.

DETD The **calcium release** channel in muscle is a large protein that spans the gap between the transverse tubule and the SR. The



channel. . . (1988)]. The resting level of calcium is elevated in the myoplasm of MH muscle (Lopez et al, supra), and calcium-induced **calcium release** is activated at a lower calcium threshold in MH pigs than in normal pigs. This threshold is further lowered in. . . halothane (Nelson, 1988). Ohta et al supra, and Mickelson et al. supra, both reported an increased rate of calcium induced **calcium release** in MHS muscle. The latter study indicated that the ryanodine receptor from MHS muscle has a higher affinity for ryanodine. . .

DETD . . . the work disclosed herein. The deduced amino acid sequence comprises 5037 amino acids. The predicted protein structure suggests that the **calcium release** channel, comprising four transmembrane domains and potential regulatory sequences, lies in the C-terminal portion of the molecule. The remainder of. . .

DETD . . . (1988)]. By analogy, amino acid substitutions in the homologous transmembrane segments of the human ryanodine receptor could alter rates of **calcium release** and account for the MH phenotype.

L10 ANSWER 37 OF 39 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

AN 1993:410391 BIOSIS

DN PREV199396076116

TI Fc-gamma receptor activation of neutrophils in cryoglobulin-induced leukocytoclastic vasculitis.

AU Hundt, Matthias; Zielinska-Skowronek, Margot; Schmidt, Reinhold E. [Reprint author]

CS Abt. Immunologie Transfusionsmedizin, Med. Hochschule Hannover, Konstanty-Gutschow-Str. 8, W-3000 Hannover 61, Germany

SO Arthritis and Rheumatism, (1993) Vol. 36, No. 7, pp. 974-982.

CODEN: ARHEAW. ISSN: 0004-3591.

DT Article

LA English

ED Entered STN: 8 Sep 1993

Last Updated on STN: 9 Sep 1993

AB Objective: The role of Fc-gamma receptors (Fc-gamma-R) in type I cryoglobulinemia was investigated to characterize novel mechanisms of neutrophil activation in the pathogenesis of leukocytoclastic vasculitis. Methods: Neutrophils from healthy donors were incubated with purified monoclonal IgG1-kappa cryoglobulin complexes in vitro. Changes in surface antigen expression and mechanisms of intracellular hydrogen peroxide production and **calcium release** were measured by flow cytometry. Results: After incubation for 2 hours, surface expression of Fc-gamma-RI (CD64), CD66, and CD67 was up-regulated; Fc-gamma-RII (CDw32), Fc-gamma-RIII (CD16), and LAM-1 were down-regulated. Using solubilized and complexed cryoglobulins, it was demonstrated that complex formation is necessary to induce intracellular H-2O-2 production and **calcium release** from intracellular stores. Both H-2O-2 generation and calcium mobilization could be inhibited by pretreatment with F(ab')-2 fragments of monoclonal antibodies (MAb) against Fc-gamma-RIII. In contrast, Fab fragments of anti-Fc-gamma-RII MAb failed to block these activations. Neither the cryoglobulin complex-induced production of H-2O-2 nor the increase in cytoplasmic calcium was affected by treatment with pertussis toxin, which suggests that pertussis toxin-sensitive G proteins are not involved in signal transduction. Conclusion: These results indicate that Fc-gamma-RIII plays a major role in the pathogenesis of leukocytoclastic vasculitis.

AB. . . purified monoclonal IgG1-kappa cryoglobulin complexes in vitro. Changes in surface antigen expression and mechanisms of intracellular hydrogen peroxide production and **calcium release** were measured by flow cytometry. Results: After incubation for 2 hours, surface expression of Fc-gamma-RI (CD64), CD66, and CD67 was. . . down-regulated. Using solubilized and complexed cryoglobulins, it was demonstrated that complex formation is necessary to induce intracellular H-2O-2 production and **calcium release** from intracellular stores. Both H-2O-2 generation and calcium mobilization could be inhibited by pretreatment with F(ab')-2 fragments of monoclonal antibodies. . .

ORGN . . .

Super Taxa

Primates; Mammalia; Vertebrata; Chordata; Animalia  
 Organism Name  
   human  
 Taxa Notes  
   Animals, Chordates, Humans, Mammals, Primates, Vertebrates  
 ORGN Classifier  
   **Mycoplasmataceae**   07512  
 Super Taxa  
   **Mycoplasmatales; Mycoplasmas; Eubacteria; Bacteria;**  
   Microorganisms  
 Organism Name  
   **Mycoplasma arthritidis**  
 Taxa Notes  
   Bacteria, Eubacteria, Microorganisms

L10 ANSWER 38 OF 39 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights reserved on STN  
 AN 93120610 EMBASE  
 DN 1993120610  
 TI Calcium transients and **calcium release** in rat fast-twitch skeletal muscle fibres.  
 AU Garcia J.; Schneider M.F.  
 CS Department of Biological Chemistry, Univ. Maryland School of Medicine, 660 West Redwood Street, Baltimore, MD 21201, United States  
 SO Journal of Physiology, (1993) Vol. 463, pp. 709-728. .  
   ISSN: 0022-3751 CODEN: JPHYA7  
 CY United Kingdom  
 DT Journal; Article  
 FS 002 Physiology  
   029 Clinical Biochemistry  
 LA English  
 SL English  
 ED Entered STN: 30 May 1993  
   Last Updated on STN: 30 May 1993  
 AB 1. Calcium transients were recorded from cut segments of fast-twitch rat skeletal muscle fibres stretched to 3.7-4.0  $\mu\text{m}$  per sarcomere and voltage clamped at a holding potential of -80 mV using the double Vaseline-gap technique. Calcium transients were monitored simultaneously with the two calcium indicators antipyrilazo III (AP III) and fura-2. AP III was used to record the calcium changes in response to 10-200 ms depolarizing pulses to different membrane potentials while fura-2 monitored the slow decay of the transient (during 16-20 s) and the resting calcium concentration. Experiments were performed at 14-17°C. 2. For 50-100 ms depolarizing pulses calcium transients were first detected between -30 and -20 mV in a total of twenty-one fibres. The transients recorded with AP III showed a plateau for small pulses (-20 mV) and a steady increase during stronger pulses (-10 mV and more positive). Upon repolarization the transients decayed towards the baseline. The signal recorded simultaneously with fura-2 showed a continuous increase of the transient during the pulses at all membrane potentials. The amplitude of the calcium transients for the large pulses could not be followed with fura-2 due to saturation of the dye. 3. The signals obtained with both dyes were used to determine the kinetics of the calcium-fura-2 reaction inside the fibres. The mean values of the kinetic parameters were: the on rate constant ( $k(\text{on})$ ) =  $5.1 \times 10^8 \text{ M}^{-1} \text{ s}^{-1}$ , the off rate constant ( $k(\text{off})$ ) =  $26 \text{ s}^{-1}$ , and  $k(\text{off})/k(\text{on})$  ( $K(\text{D})$ ) = 69.7 nM. 4. The fast phase of decay of the calcium transients after the pulses was studied from the records obtained with AP III. For depolarizing pulses of the same duration, the rate of decay of the transients after the pulse was slower the stronger the depolarization. For pulses to the same membrane potential, the rate of decay was slower the longer the pulse duration. Both stimulating patterns indicated saturation of the removal system in the muscle fibres due to occupancy of slowly equilibrating myoplasmic calcium binding sites by released calcium. 5. The fast phase of decay of the signals obtained with AP III was well fitted with a model of the system for removing calcium from the myofilament space. 6. The rate of **calcium release** ( $R(\text{rel})$ ) from the sarcoplasmic reticulum was calculated once the removal system was characterized in the same fibre. The  $R(\text{rel})$  waveform during a pulse consisted of a fast initial peak and a steady

level of smaller amplitude. The peak appeared for depolarizations about 10 mV more positive than needed to see the steady level in some fibres. The average peak release for pulses to 0 or + 10 mV was  $7.5 \mu\text{M ms}^{-1}$  with a range of variation from 3.0 to  $17.5 \mu\text{M ms}^{-1}$ . 7. In addition to the fast decay of  $[(\text{Ca}^{2+})]$  studied with AP III, we examined a slower decay of  $[(\text{Ca}^{2+})]$  after the pulse using fura-2 signals sampled for up to 20 s after a pulse. The time course of the slow decay was analysed and quantified by fitting the records with two exponential functions plus a constant. The mean values of the time constants ( $\tau$ ) and their amplitudes (A) were:  $\tau(s1) = 0.81 \text{ s}$ ,  $A(s1) = 33.3 \text{ nM}$ ;  $\tau(s2) = 15.8 \text{ s}$ ,  $A(s2) = 12.4 \text{ nM}$ . The value of the constant was set as the resting calcium concentration measured at the baseline level before the depolarizing pulse for each of the eleven fibres studied.

TI Calcium transients and **calcium release** in rat fast-twitch skeletal muscle fibres.

AB . . . was well fitted with a model of the system for removing calcium from the myofilament space. 6. The rate of **calcium release** (R(rel)) from the sarcoplasmic reticulum was calculated once the removal system was characterized in the same fibre. The R(rel) waveform. . .

CT Medical Descriptors:

- \*calcium current
- \*calcium transport
- \*fast muscle
- \*skeletal muscle
- animal cell
- article
- binding site
- cell membrane potential
- depolarization
- muscle cell
- mycoplasma
- myofilament
- nonhuman
- priority journal
- rat
- repolarization
- sarcomere
- sarcoplasmic reticulum
- voltage clamp
- waveform
- calcium ion: EC, endogenous compound
- fura 2

L10 ANSWER 39 OF 39 USPATFULL on STN

AN 87:36077 USPATFULL

TI Inhibition of mammalian collagenolytic enzymes by tetracyclines

IN Golub, Lorne M., Smithtown, NY, United States

McNamara, Thomas F., Port Jefferson, NY, United States

Ramamurthy, N. S., Smithtown, NY, United States

PA Research Foundation of State University, Albany, NY, United States (U.S. corporation)

PI US 4666897 19870519

AI US 1983-566517 19831229 (6)

DT Utility

FS Granted

EXNAM Primary Examiner: Meyers, Albert T.; Assistant Examiner: Kilcoyne, John M.

LREP Behr, Omri M.

CLMN Number of Claims: 10

ECL Exemplary Claim: 1

DRWN 8 Drawing Figure(s); 4 Drawing Page(s)

LN.CNT 786

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of reducing pathologically excessive levels of activity of collagenolytic enzymes in mammals to substantially normal levels by administering 10-100% of the normal antibiotic therapeutic dose of a tetracycline is disclosed.

SUMM . . . (1980)). Brown's sole rationale for the use of these

antibiotics is to eliminate infection of the joint tissues with the "**mycoplasma** group of microorganisms which he believes is the cause of arthritis. However, there has been heretofore no recognition of the. . .

DETD . . . (Werner and Raisz, Endocrinology, 90, 752 (1972) and Gomes, et. al., Calc. Tiss. Res., 19, 285 (1976)). The **.sup.45 calcium released** into the media was calculated as a percentage of the total radioactive calcium measured in the bones.

DETD . . . on PTH-enhanced bone resorption (see Tables 3 & 5). In contrast, minocycline, a tetracycline antibiotic, was found to inhibit **.sup.45 calcium release** in a dose responsive manner in the absence of any other antibiotics in the media (see Table 3) and its. . . semi-synthetic tetracycline was added to the culture media together with penicillin and streptomycin (note that the reduced level of **.sup.45 calcium release** in the presence of 20 µg/ml minocycline plus 100 or 200 µg/ml penicillin-streptomycin was not significantly different from the level. . .

=> s (calcium release?) and polypeptide? and ((30 kda)or(30 kilodalton?)or(30,000 dalton?))  
L11 31 (CALCIUM RELEASE?) AND POLYPEPTIDE? AND ((30 KDA) OR(30 KILODALTON?) OR(30,000 DALTON?))

=> dup rem l11  
PROCESSING COMPLETED FOR L11  
L12 30 DUP REM L11 (1 DUPLICATE REMOVED)

=> s l12 and tracheal  
L13 1 L12 AND TRACHEAL

=> d

L13 ANSWER 1 OF 1 USPATFULL on STN  
AN 2005:330188 USPATFULL  
TI Mycoplasma **polypeptides**  
IN Hsu, Walter H., 2725 Northridge Circle, Ames, IA, UNITED STATES 50014  
Young, Theresa F., Carlsbad, CA, UNITED STATES  
Ross, Richard F., Ames, IA, UNITED STATES  
Zhou, En-Min, Ames, IA, UNITED STATES  
PA Iowa State University Research Foundation, Inc., Ames, IA, UNITED STATES, 50011-2131 (U.S. corporation)  
PI US 2005287163 A1 20051229  
AI US 2003-509926 A1 20030404 (10)  
WO 2003-US10305 20030404  
20050729 PCT 371 date  
PRAI US 2003-370344P 20020405 (60)  
DT Utility  
FS APPLICATION  
LN.CNT 1268  
INCL INCLM: 424/190.100  
INCLS: 435/007.320; 435/069.300; 435/252.300; 435/471.000; 530/350.000;  
530/388.400; 536/023.700  
NCL NCLM: 424/190.100  
NCLS: 435/007.320; 435/069.300; 435/252.300; 435/471.000; 530/350.000;  
530/388.400; 536/023.700  
IC [7]  
ICM A61K039-02  
ICS G01N033-554; G01N033-569; C07H021-04; C07K014-35  
IPCI A61K0039-02 [ICM,7]; G01N0033-554 [ICS,7]; G01N0033-569 [ICS,7];  
C07H0021-04 [ICS,7]; C07K0014-35 [ICS,7]  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d bib ab l12 1-  
YOU HAVE REQUESTED DATA FROM 30 ANSWERS - CONTINUE? Y/(N):y

L12 ANSWER 1 OF 30 USPATFULL on STN  
AN 2006:21475 USPATFULL  
TI CD38 modulated chemotaxis

IN Lund, Frances E., Saranac Lake, NY, UNITED STATES  
Randall, Troy D., Saranac Lake, NY, UNITED STATES  
Partida-Sanchez, Santiago, Galloway, OH, UNITED STATES  
PI US 2006019308 A1 20060126  
AI US 2005-58924 A1 20050215 (11)  
RLI Continuation-in-part of Ser. No. US 2001-982616, filed on 17 Oct 2001,  
GRANTED, Pat. No. US 6955884  
PRAI US 2000-241065P 20001017 (60)  
DT Utility  
FS APPLICATION  
LREP KENYON & KENYON, ONE BROADWAY, NEW YORK, NY, 10004, US  
CLMN Number of Claims: 36  
ECL Exemplary Claim: 1-34  
DRWN 35 Drawing Page(s)  
LN.CNT 3994

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to methods for modulating the migratory activity of cells expressing CD38 for the treatment of disorders including, but not limited to, inflammation, ischemia, asthma, autoimmune disease, diabetes, arthritis, allergies, infection with pathogenic organisms, such as parasites, and transplant rejection. Such cells include, for example, neutrophils, lymphocytes, eosinophils, macrophages and dendritic cells. The invention further relates to drug screening assays designed to identify compounds that modulate the ADP-ribosyl cyclase activity of CD38 and the use of such compounds in the treatment of disorders involving CD38 modulated cell migration. Additionally, the invention relates to the isolation and characterization of a CD38 homologue from the parasitic flatworm, *Schistosoma mansoni*.

L12 ANSWER 2 OF 30 USPATFULL on STN

AN 2006:3468 USPATFULL  
TI Recombinant anti-osteopontin antibody and use thereof  
IN Uede, Toshimitsu, Sapporo-shi, JAPAN  
Kon, Shigeyuki, Fujioka-shi, JAPAN  
Yamamoto, Nobuchika, Osaka-shi, JAPAN  
Higuchi, Hirofumi, Kikuchi-gun, JAPAN  
Torikai, Masaharu, Kikuchi-gun, JAPAN  
Tokieda, Yoshiyuki, Kikuchi-gun, JAPAN  
Nakashima, Toshihiro, Kikuchi-gun, JAPAN  
Maeda, Hiroaki, Kikuchi-gun, JAPAN  
PA IMMUNO-BIOLOGICAL LABORATORIES CO., LTD., Gunma, JAPAN, 375-0005  
(non-U.S. corporation)  
FUJISAWA PHARMACEUTICAL CO., LTD., Osaka, JAPAN, 541-8514 (non-U.S. corporation)  
PI US 2006002923 A1 20060105  
AI US 2003-489866 A1 20020925 (10)  
WO 2002-JP9868 20020925  
20040324 PCT 371 date

PRAI JP 2003-2001290700 20010925  
DT Utility  
FS APPLICATION  
LREP OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C., 1940 DUKE STREET,  
ALEXANDRIA, VA, 22314, US  
CLMN Number of Claims: 45  
ECL Exemplary Claim: 1  
DRWN 17 Drawing Page(s)  
LN.CNT 2652

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A recombinant antibody in which at least the constant regions in the heavy chain and the light chain have been converted into human-origin regions and which inhibits the binding of an integrin recognizing the RGD sequence to osteopontin or its fragment and inhibits the binding of an integrin recognizing the SVVYGLR sequence or a sequence corresponding thereto to osteopontin or its fragment. This antibody is useful as a remedy for autoimmune diseases and a remedy for rheumatism or rheumatoid arthritis. Thus, a method of treating autoimmune diseases, rheumatism or rheumatoid arthritis is provided. This osteopontin antibody is useful in a diagnostic for rheumatism and a method of diagnosing rheumatism too.

L12 ANSWER 3 OF 30 USPATFULL on STN  
AN 2005:330188 USPATFULL  
TI Mycoplasma **polypeptides**  
IN Hsu, Walter H., 2725 Northridge Circle, Ames, IA, UNITED STATES 50014  
Young, Theresa F., Carlsbad, CA, UNITED STATES  
Ross, Richard F., Ames, IA, UNITED STATES  
Zhou, En-Min, Ames, IA, UNITED STATES  
PA Iowa State University Research Foundation, Inc., Ames, IA, UNITED STATES, 50011-2131 (U.S. corporation)  
PI US 2005287163 A1 20051229  
AI US 2003-509926 A1 20030404 (10)  
WO 2003-US10305 20030404  
20050729 PCT 371 date  
PRAI US 2003-370344P 20020405 (60)  
DT Utility  
FS APPLICATION  
LREP FISH & RICHARDSON P.C., PO BOX 1022, MINNEAPOLIS, MN, 55440-1022, US  
CLMN Number of Claims: 33  
ECL Exemplary Claim: 1  
DRWN 15 Drawing Page(s)  
LN.CNT 1268

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides methods and materials related to mycoplasma. For example, the invention provides mycoplasma **polypeptides** having the ability to increase **calcium release** from cells (e.g., porcine ciliated tracheal cells) as well as antibodies that bind to such mycoplasma **polypeptides**. In addition, the invention provides methods for identifying inhibitors of mycoplasma-induced **calcium release** from porcine ciliated tracheal cells.

L12 ANSWER 4 OF 30 USPATFULL on STN  
AN 2005:183963 USPATFULL  
TI Growth factor homolog zveg3  
IN Gao, Zeren, Redmond, WA, UNITED STATES  
Hart, Charles E., Woodinville, WA, UNITED STATES  
Piddington, Christopher S., Thousand Oaks, CA, UNITED STATES  
Sheppard, Paul O., Granite Falls, WA, UNITED STATES  
Shoemaker, Kimberly E., Bellevue, WA, UNITED STATES  
Gilbertson, Debra G., Seattle, WA, UNITED STATES  
West, James W., Seattle, WA, UNITED STATES  
PA ZymoGenetics, Inc. (U.S. corporation)  
PI US 2005159358 A1 20050721  
AI US 2004-21088 A1 20041222 (11)  
RLI Continuation of Ser. No. US 2000-541752, filed on 31 Mar 2000, GRANTED, Pat. No. US 6887982 Continuation-in-part of Ser. No. US 1999-457066, filed on 7 Dec 1999, GRANTED, Pat. No. US 6432673  
PRAI US 1998-111173P 19981207 (60)  
US 1999-142576P 19990706 (60)  
US 1999-161653P 19991021 (60)  
US 1999-165255P 19991112 (60)  
DT Utility  
FS APPLICATION  
LREP Gary E. Parker, Patent Department, ZymoGenetics, Inc., 1201 Eastlake Avenue East, Seattle, WA, 98102, US  
CLMN Number of Claims: 20  
ECL Exemplary Claim: 1  
DRWN 12 Drawing Page(s)  
LN.CNT 5035

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB **Polypeptide** growth factors, methods of making them, polynucleotides encoding them, antibodies to them, and methods of using them are disclosed. The **polypeptides** comprise an amino acid segment that is at least 90% identical to residues 46-163 of SEQ ID NO:2 or residues 235-345 of SEQ ID NO:2. Multimers of the **polypeptides** are also disclosed. The **polypeptides**, multimeric proteins, and polynucleotides can be used in the study and regulation of cell and tissue development, as components of cell culture media, and as diagnostic agents.

L12 ANSWER 5 OF 30 USPATFULL on STN  
AN 2005:112372 USPATFULL  
TI Full-length human cDNAs encoding potentially secreted proteins  
IN Dumas Milne Edwards, Jean-Baptiste, Paris, FRANCE  
Bougueleret, Lydie, Petit Lancy, SWITZERLAND  
Jobert, Severin, Paris, FRANCE  
PI US 2005096458 A1 20050505  
AI US 2003-643836 A1 20030819 (10)  
RLI Division of Ser. No. US 2000-731872, filed on 7 Dec 2000, ABANDONED  
PRAI US 1999-169629P 19991208 (60)  
US 2000-187470P 20000306 (60)  
DT Utility  
FS APPLICATION  
LREP SALIWANCHIK LLOYD & SALIWANCHIK, A PROFESSIONAL ASSOCIATION, PO BOX  
142950, GAINESVILLE, FL, 32614-2950, US  
CLMN Number of Claims: 16  
ECL Exemplary Claim: 1  
DRWN 5 Drawing Page(s)  
LN.CNT 28075

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention concerns GENSET polynucleotides and **polypeptides**  
. Such GENSET products may be used as reagents in forensic analyses, as  
chromosome markers, as tissue/cell/organelle-specific markers, in the  
production of expression vectors. In addition, they may be used in  
screening and diagnosis assays for abnormal GENSET expression and/or  
biological activity and for screening compounds that may be used in the  
treatment of GENSET-related disorders.

L12 ANSWER 6 OF 30 USPATFULL on STN  
AN 2005:107326 USPATFULL  
TI Antibodies reactive to the c-terminal portion of growth factor homolog  
zvegfg3  
IN Gao, Zeren, Redmond, WA, UNITED STATES  
Hart, Charles E., Woodinville, WA, UNITED STATES  
Piddington, Christopher S., Thousand Oaks, CA, UNITED STATES  
Sheppard, Paul O., Granite Falls, WA, UNITED STATES  
Shoemaker, Kimberly E., Bellevue, WA, UNITED STATES  
PA ZymoGenetics, Inc., Seattle, WA, UNITED STATES (U.S. corporation)  
PI US 6887982 B1 20050503  
AI US 2000-541752 20000331 (9)  
RLI Continuation-in-part of Ser. No. US 1999-457066, filed on 7 Dec 1999,  
PENDING  
PRAI US 1999-165255P 19991112 (60)  
US 1999-161653P 19991021 (60)  
US 1999-142576P 19990706 (60)  
US 1998-111173P 19981207 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Spector, Lorraine  
LREP Parker, Gary E.  
CLMN Number of Claims: 4  
ECL Exemplary Claim: 1  
DRWN 6 Drawing Figure(s); 12 Drawing Page(s)  
LN.CNT 5009

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB **Polypeptide** growth factors, methods of making them,  
polynucleotides encoding them, antibodies to them, and methods of using  
them are disclosed. The **polypeptides** comprise an amino acid  
segment that is at least 90% identical to residues 46-163 of SEQ ID NO:2  
or residues 235-345 of SEQ ID NO:2. Multimers of the  
**polypeptides** are also disclosed. The **polypeptides**,  
multimeric proteins, and polynucleotides can be used in the study and  
regulation of cell and tissue development, as components of cell culture  
media, and as diagnostic agents.

L12 ANSWER 7 OF 30 USPATFULL on STN  
AN 2004:287884 USPATFULL  
TI Compositions and methods for treating neurological disorders and

diseases  
IN Roch, Jean-Marc, Salt Lake City, UT, UNITED STATES  
Bartel, Paul, Salt Lake City, UT, UNITED STATES  
Heichman, Karen, Salt Lake City, UT, UNITED STATES  
PA Myriad Genetics, Incorporated, Salt Lake City, UT, UNITED STATES (U.S.  
corporation)  
PI US 2004226056 A1 20041111  
AI US 2004-776013 A1 20040209 (10)  
RLI Continuation-in-part of Ser. No. US 2001-948904, filed on 10 Sep 2001,  
ABANDONED Division of Ser. No. US 1999-466139, filed on 21 Dec 1999,  
ABANDONED Continuation-in-part of Ser. No. US 2001-975072, filed on 12  
Oct 2001, ABANDONED Continuation-in-part of Ser. No. US 2002-194967,  
filed on 15 Jul 2002, PENDING  
PRAI US 1998-113534P 19981222 (60)  
US 1999-124120P 19990312 (60)  
US 1999-141243P 19990630 (60)  
US 2000-240790P 20001017 (60)  
US 2001-304775P 20010713 (60)  
DT Utility  
FS APPLICATION  
LREP MYRIAD GENETICS INC., LEGAL DEPARTMENT, 320 WAKARA WAY, SALT LAKE CITY,  
UT, 84108  
CLMN Number of Claims: 19  
ECL Exemplary Claim: 1  
DRWN 28 Drawing Page(s)  
LN.CNT 12774  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The present invention generally relates to methods and compositions for  
treating neurological disorders and diseases. In addition, methods for  
selecting therapeutic agents useful for treating neurological disorders  
and diseases are provided.

L12 ANSWER 8 OF 30 USPATFULL on STN  
AN 2004:151408 USPATFULL  
TI Molecules for diagnostics and therapeutics  
IN Panzer, Scott R, Sunnyvale, CA, UNITED STATES  
Lincoln, Stephen E, Potomac, MD, UNITED STATES  
Altus, Christina M, Campbell, CA, UNITED STATES  
Dufour, Gerard E, Castro Valley, CA, UNITED STATES  
Jackson, Jennifer L, Santa Cruz, CA, UNITED STATES  
Jones, Anissa L, San Jose, CA, UNITED STATES  
Dam, Tam C, San Jose, CA, UNITED STATES  
Liu, Tommy, Daly City, CA, UNITED STATES  
Harris, Bernard, Sunnyvale, CA, UNITED STATES  
Flores, Vincent Z, Union City, CA, UNITED STATES  
Daffo, Abel, San Jose, CA, UNITED STATES  
Marwaha, Rakesh, Burnaby, CANADA  
Chen, Alice J, San Jose, CA, UNITED STATES  
Chang, Simon C, Sunnyvale, CA, UNITED STATES  
Gerstin, Edward H, JR., San Jose, CA, UNITED STATES  
Peralta, Careyna H, Santa Clara, CA, UNITED STATES  
David, Marie H, Daly City, CA, UNITED STATES  
Lewis, Samantha A, San Leandro, CA, UNITED STATES  
PI US 2004115629 A1 20040617  
AI US 2003-250889 A1 20030709 (10)  
WO 2002-US1009 20020109  
DT Utility  
FS APPLICATION  
LREP INCYTE CORPORATION, 3160 PORTER DRIVE, PALO ALTO, CA, 94304  
CLMN Number of Claims: 28  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 16703  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The present invention provides purified human polynucleotides for  
diagnostics and therapeutics (dithp). Also encompassed are the  
**polypeptides** (DITHP) encoded by dithp. The invention also  
provides for the use of dithp, or complements, oligonucleotides, or  
fragments thereof in diagnostic assays. The invention further provides



for vectors and host cells containing dithp for the expression of DITHP. The invention additionally provides for the use of isolated and purified DITHP to induce antibodies and to screen libraries of compounds and the use of anti-DITHP antibodies in diagnostic assays. Also provided are microarrays containing dithp and methods of use.

L12 ANSWER 9 OF 30 USPATFULL on STN

AN 2004:76577 USPATFULL

TI Novel 21910, 56634, 55053, 2504, 15977, 14760, 25501, 17903, 3700, 21529, 26176, 26343, 56638, 18610, 33217, 21967, H1983, M1983, 38555 or 593 molecules and uses therefor

IN Kapeller-Libermann, Rosana, Chestnut Hill, MA, UNITED STATES

Hunter, John Joseph, Somerville, MA, UNITED STATES

Meyers, Rachel E., Newton, MA, UNITED STATES

Rudolph-Owen, Laura A., Medford, MA, UNITED STATES

Curtis, Rory A. J., Framingham, MA, UNITED STATES

Olandt, Peter J., Newton, MA, UNITED STATES

Tsai, Fong-Ying, Newton, MA, UNITED STATES

Galvin, Katherine M., Jamaica Plain, MA, UNITED STATES

Chun, Miyoung, Belmont, MA, UNITED STATES

Williamson, Mark J., Saugus, MA, UNITED STATES

Silos-Santiago, Inmaculada, Del Mar, CA, UNITED STATES

Bandaru, Rajasekhar, Watertown, MA, UNITED STATES

PA Millennium Pharmaceuticals, Inc. (U.S. corporation)

PI US 2004058355 A1 20040325

AI US 2003-423543 A1 20030425 (10)

RLI Continuation-in-part of Ser. No. US 2002-278036, filed on 22 Oct 2002, PENDING Continuation of Ser. No. US 2000-711216, filed on 9 Nov 2000, ABANDONED Continuation-in-part of Ser. No. US 2001-12055, filed on 13 Nov 2001, PENDING Continuation-in-part of Ser. No. US 2001-3690, filed on 15 Nov 2001, PENDING Continuation-in-part of Ser. No. US 2001-797039, filed on 28 Feb 2001, PENDING Continuation-in-part of Ser. No. US 2002-217168, filed on 12 Aug 2002, PENDING Continuation-in-part of Ser. No. US 2001-929218, filed on 14 Aug 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-963159, filed on 25 Sep 2001, ABANDONED Continuation-in-part of Ser. No. US 2002-121911, filed on 12 Apr 2002, GRANTED, Pat. No. US 6607892 Division of Ser. No. US 1999-412210, filed on 5 Oct 1999, GRANTED, Pat. No. US 6403358 Continuation-in-part of Ser. No. US 2002-105989, filed on 25 Mar 2002, PENDING Continuation of Ser. No. US 1999-392189, filed on 9 Sep 1999, ABANDONED Continuation-in-part of Ser. No. US 2003-336153, filed on 3 Jan 2003, PENDING Continuation of Ser. No. US 2001-845044, filed on 27 Apr 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-928531, filed on 13 Aug 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-920346, filed on 31 Jul 2001, PENDING Continuation-in-part of Ser. No. US 2001-8016, filed on 8 Nov 2001, PENDING Continuation-in-part of Ser. No. US 2001-909743, filed on 20 Jul 2001, PENDING Division of Ser. No. US 1999-448076, filed on 23 Nov 1999, GRANTED, Pat. No. US 6300092 Continuation-in-part of Ser. No. US 1999-276400, filed on 25 Mar 1999, GRANTED, Pat. No. US 6140056 Continuation-in-part of Ser. No. US 2003-336489, filed on 2 Jan 2003, PENDING Continuation of Ser. No. US 2000-608921, filed on 30 Jun 2000, ABANDONED Continuation-in-part of Ser. No. US 1998-163821, filed on 30 Sep 1998, ABANDONED Continuation-in-part of Ser. No. US 2002-60763, filed on 30 Jan 2002, ABANDONED Continuation of Ser. No. US 1999-365162, filed on 30 Jul 1999, ABANDONED

PRAI US 2000-205447P 20000519 (60)

US 2000-248325P 20001114 (60)

US 2000-248893P 20001115 (60)

US 2000-186061P 20000229 (60)

US 2001-312539P 20010815 (60)

US 2000-257511P 20001222 (60)

US 2000-234922P 20000925 (60)

US 2000-200688P 20000428 (60)

US 2000-235035P 20000925 (60)

US 2000-221925P 20000731 (60)

US 2001-260166P 20010105 (60)

US 2000-246669P 20001108 (60)

US 1999-117580P 19990127 (60)

DT Utility

FS APPLICATION  
LREP Millennium Pharmaceuticals, Inc., 75 Sidney Street, Cambridge, MA, 02139  
CLMN Number of Claims: 19  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 14751

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides isolated nucleic acids molecules, designated 21910, 56634, 55053, 2504, 15977, 14760, 25501, 17903, 3700, 21529, 26176, 26343, 56638, 18610, 33217, 21967, h1983, m1983, 38555 and 593 nucleic acid molecules. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 21910, 56634, 55053, 2504, 15977, 14760, 25501, 17903, 3700, 21529, 26176, 26343, 56638, 18610, 33217, 21967, h1983, m1983, 38555 and 593 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 21910, 56634, 55053, 2504, 15977, 14760, 25501, 17903, 3700, 21529, 26176, 26343, 56638, 18610, 33217, 21967, h1983, m1983, 38555 or 593 gene has been introduced or disrupted. The invention still further provides isolated 21910, 56634, 55053, 2504, 15977, 14760, 25501, 17903, 3700, 21529, 26176, 26343, 56638, 18610, 33217, 21967, h1983, m1983, 38555 or 593 proteins, fusion proteins, antigenic peptides and anti-21910, 56634, 55053, 2504, 15977, 14760, 25501, 17903, 3700, 21529, 26176, 26343, 56638, 18610, 33217, 21967, h1983, m1983, 38555 or 593 antibodies. Diagnostic and therapeutic methods utilizing compositions of the invention are also provided.

L12 ANSWER 10 OF 30 USPATFULL on STN

AN 2004:63735 USPATFULL

TI Molecules for diagnostics and therapeutics

IN Panzer, Scott R., Sunnyvale, CA, UNITED STATES

Spiro, Peter A., Palo Alto, CA, UNITED STATES

Banville, Steven C., Palo Alto, CA, UNITED STATES

Shah, Purvi, San Jose, CA, UNITED STATES

Chalup, Michael S., Sunnyvale, CA, UNITED STATES

Chang, Simon C, Mountain View, CA, UNITED STATES

Chen, Alice J., San Jose, CA, UNITED STATES

D'Sa, Steven A., East Palo, CA, UNITED STATES

Amshey, Stefan, San Francisco, CA, UNITED STATES

Dahl, Christopher E., Fremont, CA, UNITED STATES

Dam, Tam C., San Jose, CA, UNITED STATES

Daniels, Susan E., Palo Alto, CA, UNITED STATES

Dufour, Gerard E., Castro Valley, CA, UNITED STATES

Flores, Vincent, Union City, CA, UNITED STATES

Fong, Willy T., San Francisco, CA, UNITED STATES

Greenawalt, Lila B., San Jose, CA, UNITED STATES

Jackson, Jennifer L., Mountain View, CA, UNITED STATES

Jones, Anissa L., San Jose, CA, UNITED STATES

Liu, Tommy F., Daly City, CA, UNITED STATES

Lincoln, Ann M. Roseberry, Redwood City, CA, UNITED STATES

Rosen, Bruce H., Menlo Park, CA, UNITED STATES

Russo, Frank D., Rossette Court Sunnyvale, CA, UNITED STATES

Stockdreher, Theresa K., Sunnyvale, CA, UNITED STATES

Daffo, Abel, San Jose, CA, UNITED STATES

Wright, Rachel J., Mountain View, CA, UNITED STATES

Yap, Pierre E., Lafayette, CA, UNITED STATES

Yu, Jimmy Y., Fremont, CA, UNITED STATES

Bradley, Diana L., Soquel, CA, UNITED STATES

Bratcher, Shawn R., Mountain View, CA, UNITED STATES

Chen, Wensheng, Mountain View, CA, UNITED STATES

Cohen, Howard J., Palo Alto, CA, UNITED STATES

Hodgson, David M., Ann Arbor, MI, UNITED STATES

Lincoln, Stephen E., Redwood City, CA, UNITED STATES

Jackson, Stuart E., Mountain View, CA, UNITED STATES

PI US 2004048253 A1 20040311

AI US 2003-220120 A1 20030605 (10)

WO 2001-US6059 20010221

DT Utility

FS APPLICATION

LREP Incyte Genomics Inc, Legal Department, 3160 Porter Drive, Palo Alto, CA, 94304

CLMN Number of Claims: 27

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 17872

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides purified human polynucleotides for diagnostics and therapeutics (dithp). Also encompassed are the **polypeptides** (DITHP) encoded by dithp. The invention also provides for the use of dithp, or complements, oligonucleotides, or fragments thereof in diagnostic assays. The invention further provides for vectors and host cells containing dithp for the expression of DITHP. The invention additionally provides for the use of isolated and purified DITHP to induce antibodies and to screen libraries of compounds and the use of anti-DITHP antibodies in diagnostic assays. Also provided are microarrays containing dithp and methods of use.

L12 ANSWER 11 OF 30 USPATFULL on STN

AN 2004:18785 USPATFULL

TI Molecules for diagnostics and therapeutics

IN Hodgson, David M., Ann Arbor, MI, UNITED STATES

Lincoln, Stephen E., Potomac, MD, UNITED STATES

Russo, Frank D., Sunnyvale, CA, UNITED STATES

Albany, Peter A., Berkeley, CA, UNITED STATES

Banville, Steve C., Sunnyvale, CA, UNITED STATES

Bratcher, Shawn R., Mountain View, CA, UNITED STATES

Dufour, Gerard E., Castro Valley, CA, UNITED STATES

Cohen, Howard J., Palo Alto, CA, UNITED STATES

Rosen, Bruce H., Menlo Park, CA, UNITED STATES

Chalup, Michael S., Livingston, TX, UNITED STATES

Jackson, Jennifer L., Santa Cruz, CA, UNITED STATES

Jones, Anissa L., San Jose, CA, UNITED STATES

Yu, Jimmy Y., Fremont, CA, UNITED STATES

Greenawalt, Lila B., San Jose, CA, UNITED STATES

Panzer, Scott R., Sunnyvale, CA, UNITED STATES

Roseberry Lincoln, Ann M., Potomac, MD, UNITED STATES

Wright, Rachel J., Merivale, NEW ZEALAND

Daniels, Susan E., Mountain View, CA, UNITED STATES

PA Incyte Corporation, Palo Alto, CA, UNITED STATES (U.S. corporation)

PI US 2004014087 A1 20040122

AI US 2003-378029 A1 20030228 (10)

RLI Continuation-in-part of Ser. No. US 2001-980285, filed on 30 Nov 2001, PENDING A 371 of International Ser. No. WO 2000-US15404, filed on 31 May 2000, PENDING

PRAI US 1999-147500P 19990805 (60)

US 1999-147542P 19990805 (60)

US 1999-147541P 19990805 (60)

US 1999-147824P 19990805 (60)

US 1999-147547P 19990805 (60)

US 1999-147530P 19990805 (60)

US 1999-147536P 19990805 (60)

US 1999-147520P 19990805 (60)

US 1999-147527P 19990805 (60)

US 1999-147549P 19990805 (60)

US 1999-147377P 19990804 (60)

US 1999-147436P 19990804 (60)

US 1999-137411P 19990603 (60)

US 1999-137396P 19990603 (60)

US 1999-137417P 19990603 (60)

US 1999-137337P 19990603 (60)

US 1999-137173P 19990602 (60)

US 1999-137114P 19990602 (60)

US 1999-137259P 19990602 (60)

US 1999-137113P 19990602 (60)

US 1999-137260P 19990602 (60)

US 1999-137258P 19990602 (60)

US 1999-137109P 19990602 (60)

US 1999-137161P 19990601 (60)

DT Utility  
FS APPLICATION  
LREP INCYTE CORPORATION (formerly known as Incyte, Genomics, Inc.), 3160  
PORTER DRIVE, PALO ALTO, CA, 94304  
CLMN Number of Claims: 19  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 14819

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides purified human polynucleotides for  
diagnostics and therapeutics (dithp). Also encompassed are the  
**polypeptides** (DITHP) encoded by dithp. The invention also  
provides for the use of dithp, or complements, oligonucleotides, or  
fragments thereof in diagnostic assays. The invention further provides  
for vectors and host cells containing dithp for the expression of DITHP.  
The invention additionally provides for the use of isolated and purified  
DITHP to induce antibodies and to screen libraries of compounds and the  
use of anti-DITHP antibodies in diagnostic assays. Also provided are  
microarrays containing dithp and methods of use.

L12 ANSWER 12 OF 30 USPATFULL on STN

AN 2004:66006 USPATFULL  
TI DNA array sequence selection  
IN Lorenz, Matthias, Bethesda, MD, United States  
PA The United States of America as represented by the Department of Health  
and Human Services, Washington, DC, United States (U.S. government)  
PI US 6706867 B1 20040316  
AI US 2000-741238 20001219 (9)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Horlick, Kenneth R.; Assistant Examiner: Wilder,  
Cynthia

LREP Leydig, Voit & Mayer, Ltd.

CLMN Number of Claims: 8

ECL Exemplary Claim: 1

DRWN 3 Drawing Figure(s); 29 Drawing Page(s)

LN.CNT 23532

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides methods and compositions for the  
construction of custom cDNA microarrays. In particular, the methods  
involve the selection of relevant clusters based on knowledge and  
expression patterns using public database information and the  
identification of the best representative cDNA clones within the  
selected cluster. The methods facilitate the construction of custom  
microarrays suitable for use in any biotechnological art. In preferred  
embodiments, the present invention provides the the ImmunoChip.

L12 ANSWER 13 OF 30 USPATFULL on STN

AN 2003:277127 USPATFULL  
TI Use of transthyretin peptide/protein fusions to increase the serum  
half-life of pharmacologically active peptides/proteins  
IN Walker, Kenneth, Newbury Park, CA, UNITED STATES  
Xiong, Fei, Thousand Oaks, CA, UNITED STATES

PI US 2003195154 A1 20031016

AI US 2003-407078 A1 20030403 (10)

RLI Continuation-in-part of Ser. No. US 2002-117109, filed on 4 Apr 2002,  
PENDING

DT Utility

FS APPLICATION

LREP AMGEN INCORPORATED, MAIL STOP 27-4-A, ONE AMGEN CENTER DRIVE, THOUSAND  
OAKS, CA, 91320-1799

CLMN Number of Claims: 37

ECL Exemplary Claim: 1

DRWN 15 Drawing Page(s)

LN.CNT 3042

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a means for increasing the serum  
half-life of a selected biologically active agent by utilizing  
transthyretin (TTR) as a fusion partner with a biologically active

agent. Specifically, the present invention provides substantially homogenous preparations of TTR (or a TTR variant)-biologically active agent fusions and PEG-TTR (PEG-TTR variant)-biologically active agent fusions. As compared to the biologically active agent alone, the TTR-biologically active agent fusion and/or PEG-TTR-biologically active agent fusion has substantially increased serum half-life.

L12 ANSWER 14 OF 30 USPATFULL on STN  
AN 2003:226574 USPATFULL  
TI Processed human chemokines PHC-1 and PHC-2  
IN Forssman, Wolf-Georg, Hannover, GERMANY, FEDERAL REPUBLIC OF  
Detheux, Michel, Mons, BELGIUM  
Parmentier, Marc, Beersel, BELGIUM  
Standker, Ludger, Hannover, GERMANY, FEDERAL REPUBLIC OF  
Kirchhoff, Frank, Ulm, GERMANY, FEDERAL REPUBLIC OF  
PI US 2003158387 A1 20030821  
AI US 2002-202986 A1 20020724 (10)  
RLI Continuation-in-part of Ser. No. US 2001-891871, filed on 22 Jun 2001,  
PENDING Continuation of Ser. No. WO 2000-BE128, filed on 25 Oct 2000,  
UNKNOWN  
PRAI DE 1999-DE19951336 19991025  
EP 2000-870140 20000622  
DT Utility  
FS APPLICATION  
LREP PALMER & DODGE, LLP, KATHLEEN M. WILLIAMS, 111 HUNTINGTON AVENUE,  
BOSTON, MA, 02199  
CLMN Number of Claims: 26  
ECL Exemplary Claim: 1  
DRWN 12 Drawing Page(s)  
LN.CNT 2797

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is related to newly identified compounds, polynucleotide sequences encoding the amino acid sequences of the compounds, as well as agonists, antagonists or inhibitors of the compounds for chemokine receptors, especially the CCR-5 receptor and their use in the field of diagnostics and therapeutics involving the chemokine receptors.

L12 ANSWER 15 OF 30 USPATFULL on STN  
AN 2003:220740 USPATFULL  
TI Methods and compositions for diagnosing and treating rheumatoid arthritis  
IN Pittman, Debra D., Windham, NH, UNITED STATES  
Feldman, Jeffrey L., Arlington, MA, UNITED STATES  
Shields, Kathleen M., Harvard, MA, UNITED STATES  
Trepicchio, William L., Andover, MA, UNITED STATES  
PI US 2003154032 A1 20030814  
AI US 2001-23451 A1 20011217 (10)  
PRAI US 2000-255861P 20001215 (60)  
DT Utility  
FS APPLICATION  
LREP Patent Group, FOLEY, HOAG & ELIOT LLP, One Post Office Square, Boxton, MA, 02109  
CLMN Number of Claims: 40  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 25385

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides methods and compositions for diagnostic assays for detecting R.A. and therapeutic methods and compositions for treating R.A. The invention also provides methods for designing, identifying, and optimizing therapeutics for R.A. Diagnostic compositions of the invention include compositions comprising detection agents for detecting one or more genes that have been shown to be up- or down-regulated in cells of R.A. relative to normal counterpart cells. Exemplary detection agents include nucleic acid probes, which can be in solution or attached to a solid surface, e.g., in the form of a microarray. The invention also provides computer-readable media comprising values of levels of expression of one or more genes that are up- or down-regulated in R.A.

L12 ANSWER 16 OF 30 USPATFULL on STN  
AN 2003:219631 USPATFULL  
TI Full-length human cDNAs encoding potentially secreted proteins  
IN Dumas Milne Edwards, Jean-Baptiste, Paris, FRANCE  
Bougueleret, Lydie, Petit Lancy, SWITZERLAND  
Jobert, Severin, Paris, FRANCE  
PI US 2003152921 A1 20030814  
AI US 2001-876997 A1 20010608 (9)  
RLI Continuation-in-part of Ser. No. US 2000-731872, filed on 7 Dec 2000,  
PENDING  
PRAI US 1999-169629P 19991208 (60)  
US 2000-187470P 20000306 (60)  
DT Utility  
FS APPLICATION  
LREP Frank C. Eisenschenk, Ph.D., SALIWANCHIK, LLOYD & SALIWANCHIK, 2421 N.W.  
41 STREET, SUITE A-1, GAINESVILLE, FL, 32606-6669  
CLMN Number of Claims: 22  
ECL Exemplary Claim: 1  
DRWN 5 Drawing Page(s)  
LN.CNT 27600

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention concerns GENSET polynucleotides and **polypeptides**  
. Such GENSET products may be used as reagents in forensic analyses, as  
chromosome markers, as tissue/cell/organelle-specific markers, in the  
production of expression vectors. In addition, they may be used in  
screening and diagnosis assays for abnormal GENSET expression and/or  
biological activity and for screening compounds that may be used in the  
treatment of GENSET-related disorders.

L12 ANSWER 17 OF 30 USPATFULL on STN  
AN 2003:59938 USPATFULL  
TI Growth factor homolog zveg3  
IN Gao, Zeren, Redmond, WA, United States  
Hart, Charles E., Woodinville, WA, United States  
Piddington, Christopher S., Thousand Oaks, CA, United States  
Sheppard, Paul O., Granite Falls, WA, United States  
Shoemaker, Kimberly E., Bellevue, WA, United States  
Gilbertson, Debra G., Seattle, WA, United States  
West, James W., Seattle, WA, United States  
PA ZymoGenetics, Inc., Seattle, WA, United States (U.S. corporation)  
PI US 6528050 B1 20030304  
AI US 2000-706968 20001106 (9)  
RLI Continuation of Ser. No. US 2000-541752, filed on 31 Mar 2000  
Continuation-in-part of Ser. No. US 1999-457066, filed on 7 Dec 1999  
PRAI US 1999-165255P 19991112 (60)  
US 1999-161653P 19991021 (60)  
US 1999-142576P 19990706 (60)  
US 1998-111173P 19981207 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Spector, Lorraine; Assistant Examiner: Jiang, Dong  
LREP Parker, Gary E.  
CLMN Number of Claims: 15  
ECL Exemplary Claim: 1,8  
DRWN 12 Drawing Figure(s); 12 Drawing Page(s)  
LN.CNT 4336

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB **Polypeptide** growth factors, methods of making them,  
polynucleotides encoding them, antibodies to them, and methods of using  
them are disclosed. The **polypeptides** comprise an amino acid  
segment that is at least 90% identical to residues 46-163 of SEQ ID NO:2  
or residues 235-345 of SEQ ID NO:2. Multimers of the  
**polypeptides** are also disclosed. The **polypeptides**,  
multimeric proteins, and polynucleotides can be used in the study and  
regulation of cell and tissue development, as components of cell culture  
media, and as diagnostic agents.

L12 ANSWER 18 OF 30 USPATFULL on STN

AN 2002:314716 USPATFULL  
TI Growth factor homolog zveg3  
IN Gao, Zeren, Redmond, WA, UNITED STATES  
Hart, Charles E., Woodinville, WA, UNITED STATES  
Piddington, Christopher S., Thousand Oaks, CA, UNITED STATES  
Sheppard, Paul O., Granite Falls, WA, UNITED STATES  
Shoemaker, Kimberly E., Bellevue, WA, UNITED STATES  
Gilbertson, Debra G., Seattle, WA, UNITED STATES  
West, James W., Seattle, WA, UNITED STATES  
PA ZymoGenetics, Inc. (U.S. corporation)  
PI US 2002177193 A1 20021128  
US 6814965 B2 20041109  
AI US 2002-139583 A1 20020502 (10)  
RLI Division of Ser. No. US 1999-457066, filed on 7 Dec 1999, PENDING  
PRAI US 1998-111173P 19981207 (60)  
US 1999-142576P 19990706 (60)  
US 1999-161653P 19991021 (60)  
US 1999-165255P 19991112 (60)  
DT Utility  
FS APPLICATION  
LREP Gary E. Parker, Patent Department, ZymoGenetics, Inc., 1201 Eastlake  
Avenue East, Seattle, WA, 98102  
CLMN Number of Claims: 53  
ECL Exemplary Claim: 1  
DRWN 12 Drawing Page(s)  
LN.CNT 5072

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB **Polypeptide** growth factors, methods of making them, polynucleotides encoding them, antibodies to them, and methods of using them are disclosed. The **polypeptides** comprise an amino acid segment that is at least 90% identical to residues 46-163 of SEQ ID NO: 2 or residues 235-345 of SEQ ID NO: 2. Multimers of the **polypeptides** are also disclosed. The **polypeptides**, multimeric proteins, and polynucleotides can be used in the study and regulation of cell and tissue development, as components of cell culture media, and as diagnostic agents.

L12 ANSWER 19 OF 30 USPATFULL on STN

AN 2002:222796 USPATFULL  
TI Protein-protein interactions in neurodegenerative disorders  
IN Roch, Jean-Marc, Salt Lake City, UT, UNITED STATES  
Bartel, Paul L., Salt Lake City, UT, UNITED STATES  
PA Myriad Genetics, Inc., Salt Lake City, UT (U.S. corporation)  
PI US 2002120947 A1 20020829  
AI US 2001-949143 A1 20010910 (9)  
RLI Division of Ser. No. US 1999-466139, filed on 21 Dec 1999, PENDING  
PRAI US 1998-113534P 19981222 (60)  
US 1999-124120P 19990312 (60)  
US 1999-141243P 19990630 (60)  
DT Utility  
FS APPLICATION  
LREP ROTHWELL, FIGG, ERNST & MANBECK, P.C., 1425 K STREET, N.W., SUITE 800,  
WASHINGTON, DC, 20005  
CLMN Number of Claims: 39  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 3104

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to the discovery of protein-protein interactions that are involved in the pathogenesis of neurodegenerative disorders, including Alzheimer's disease (AD). Thus, the present invention is directed to complexes of these proteins and/or their fragments, antibodies to the complexes, diagnosis of neurodegenerative disorders (including diagnosis of a predisposition to and diagnosis of the existence of the disorder), drug screening for agents which modulate the interaction of proteins described herein, and identification of additional proteins in the pathway common to the proteins described herein.

L12 ANSWER 20 OF 30 USPATFULL on STN  
AN 2002:191539 USPATFULL  
TI Full-length human cDNAs encoding potentially secreted proteins  
IN Milne Edwards, Jean-Baptiste Dumas, Paris, FRANCE  
Bougueleret, Lydie, Petit Lancy, SWITZERLAND  
Jobert, Severin, Paris, FRANCE  
PI US 2002102604 A1 20020801  
AI US 2000-731872 A1 20001207 (9)  
PRAI US 1999-169629P 19991208 (60)  
US 2000-187470P 20000306 (60)  
DT Utility  
FS APPLICATION  
LREP John Lucas, Ph.D., J.D., Genset Corporation, 10665 Sorento Valley Road,  
San Diego, CA, 92121-1609  
CLMN Number of Claims: 29  
ECL Exemplary Claim: 1  
DRWN 5 Drawing Page(s)  
LN.CNT 28061  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The invention concerns GENSET polynucleotides and **polypeptides**  
. Such GENSET products may be used as reagents in forensic analyses, as  
chromosome markers, as tissue/cell/organelle-specific markers, in the  
production of expression vectors. In addition, they may be used in  
screening and diagnosis assays for abnormal GENSET expression and/or  
biological activity and for screening compounds that may be used in the  
treatment of GENSET-related disorders.

L12 ANSWER 21 OF 30 USPATFULL on STN  
AN 2002:134563 USPATFULL  
TI Protein-protein interactions in neurodegenerative disorders  
IN Roch, Jean-Marc, Salt Lake City, UT, UNITED STATES  
Bartel, Paul L., Salt Lake City, UT, UNITED STATES  
PI US 2002069424 A1 20020606  
AI US 2001-971677 A1 20011009 (9)  
RLI Division of Ser. No. US 1999-466139, filed on 21 Dec 1999, PENDING  
PRAI US 1998-113534P 19981222 (60)  
US 1999-124120P 19990312 (60)  
US 1999-141243P 19990630 (60)  
DT Utility  
FS APPLICATION  
LREP ROTHWELL, FIGG, ERNST & MANBECK, P.C., 555 13TH STREET, N.W., SUITE 701,  
EAST TOWER, WASHINGTON, DC, 20004  
CLMN Number of Claims: 39  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 3101  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The present invention relates to the discovery of protein-protein  
interactions that are involved in the pathogenesis of neurodegenerative  
disorders, including Alzheimer's disease (AD). Thus, the present  
invention is directed to complexes of these proteins and/or their  
fragments, antibodies to the complexes, diagnosis of neurodegenerative  
disorders (including diagnosis of a predisposition to and diagnosis of  
the existence of the disorder), drug screening for agents which modulate  
the interaction of proteins described herein, and identification of  
additional proteins in the pathway common to the proteins described  
herein.

L12 ANSWER 22 OF 30 USPATFULL on STN  
AN 2002:113904 USPATFULL  
TI Protein-protein interactions in neurodegenerative disorders  
IN Roch, Jean-Marc, Salt Lake City, UT, UNITED STATES  
Bartel, Paul L., Salt Lake City, UT, UNITED STATES  
PA MYRIAD GENETICS, INC., Salt Lake City, UT, UNITED STATES, 84108 (U.S.  
corporation)  
PI US 2002059653 A1 20020516  
AI US 2001-970666 A1 20011005 (9)  
RLI Division of Ser. No. US 1999-466139, filed on 21 Dec 1999, PENDING  
PRAI US 1998-113534P 19981222 (60)



US 1999-124120P 19990312 (60)  
US 1999-141243P 19990630 (60)  
DT Utility  
FS APPLICATION  
LREP ROTHWELL, FIGG, ERNST & MANBECK, P.C., 555 13TH STREET, N.W., SUITE 701,  
EAST TOWER, WASHINGTON, DC, 20004  
CLMN Number of Claims: 42  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 3084

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to the discovery of protein-protein interactions that are involved in the pathogenesis of neurodegenerative disorders, including Alzheimer's disease (AD). Thus, the present invention is directed to complexes of these proteins and/or their fragments, antibodies to the complexes, diagnosis of neurodegenerative disorders (including diagnosis of a predisposition to and diagnosis of the existence of the disorder), drug screening for agents which modulate the interaction of proteins described herein, and identification of additional proteins in the pathway common to the proteins described herein.

L12 ANSWER 23 OF 30 USPATFULL on STN

AN 2002:105674 USPATFULL  
TI Protein-protein interactions in neurodegenerative disorders  
IN Roch, Jean-Marc, Salt Lake City, UT, UNITED STATES  
Bartel, Paul L., Salt Lake City, UT, UNITED STATES  
PA MYRIAD GENETICS, INC., Salt Lake City, UT, 84108 (U.S. corporation)  
PI US 2002054876 A1 20020509  
AI US 2001-971675 A1 20011009 (9)  
RLI Division of Ser. No. US 1999-466139, filed on 21 Dec 1999, PENDING  
PRAI US 1998-113534P 19981222 (60)  
US 1999-124120P 19990312 (60)  
US 1999-141243P 19990630 (60)  
DT Utility  
FS APPLICATION  
LREP ROTHWELL, FIGG, ERNST & MANBECK, P.C., 555 13TH STREET, N.W., SUITE 701,  
EAST TOWER, WASHINGTON, DC, 20004  
CLMN Number of Claims: 42  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 3070

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to the discovery of protein-protein interactions that are involved in the pathogenesis of neurodegenerative disorders, including Alzheimer's disease (AD). Thus, the present invention is directed to complexes of these proteins and/or their fragments, antibodies to the complexes, diagnosis of neurodegenerative disorders (including diagnosis of a predisposition to and diagnosis of the existence of the disorder), drug screening for agents which modulate the interaction of proteins described herein, and identification of additional proteins in the pathway common to the proteins described herein.

L12 ANSWER 24 OF 30 USPATFULL on STN

AN 2002:92251 USPATFULL  
TI Protein-protein interactions in neurodegenerative disorders  
IN Roch, Jean-Marc, Salt Lake City, UT, UNITED STATES  
Bartel, Paul L., Salt Lake City, UT, UNITED STATES  
PA MYRIAD GENETICS, INC., Salt Lake City, UT (U.S. corporation)  
PI US 2002048769 A1 20020425  
AI US 2001-970814 A1 20011005 (9)  
RLI Division of Ser. No. US 1999-466139, filed on 21 Dec 1999, PENDING  
PRAI US 1998-113534P 19981222 (60)  
US 1999-124120P 19990312 (60)  
US 1999-141243P 19990630 (60)  
DT Utility  
FS APPLICATION  
LREP ROTHWELL, FIGG, ERNST & MANBECK, P.C., 555 13TH STREET, N.W., SUITE 701,

EAST TOWER, WASHINGTON, DC, 20004

CLMN Number of Claims: 50

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 3101

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to the discovery of protein-protein interactions that are involved in the pathogenesis of neurodegenerative disorders, including Alzheimer's disease (AD). Thus, the present invention is directed to complexes of these proteins and/or their fragments, antibodies to the complexes, diagnosis of neurodegenerative disorders (including diagnosis of a predisposition to and diagnosis of the existence of the disorder), drug screening for agents which modulate the interaction of proteins described herein, and identification of additional proteins in the pathway common to the proteins described herein.

L12 ANSWER 25 OF 30 USPATFULL on STN

AN 2002:85161 USPATFULL

TI Protein-protein interactions in neurodegenerative disorders

IN Roch, Jean-Marc, Salt Lake City, UT, UNITED STATES

Bartel, Paul L., Salt Lake City, UT, UNITED STATES

PA MYRIAD GENETICS, INC., Salt Lake City, UT, UNITED STATES, 84108 (U.S. corporation)

PI US 2002045201 A1 20020418

AI US 2001-970898 A1 20011005 (9)

RLI Division of Ser. No. US 1999-466139, filed on 21 Dec 1999, PENDING

PRAI US 1998-113534P 19981222 (60)

US 1999-124120P 19990312 (60)

US 1999-141243P 19990630 (60)

DT Utility

FS APPLICATION

LREP ROTHWELL, FIGG, ERNST & MANBECK, P.C., 555 13TH STREET, N.W., SUITE 701, EAST TOWER, WASHINGTON, DC, 20004

CLMN Number of Claims: 39

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 3090

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to the discovery of protein-protein interactions that are involved in the pathogenesis of neurodegenerative disorders, including Alzheimer's disease (AD). Thus, the present invention is directed to complexes of these proteins and/or their fragments, antibodies to the complexes, diagnosis of neurodegenerative disorders (including diagnosis of a predisposition to and diagnosis of the existence of the disorder), drug screening for agents which modulate the interaction of proteins described herein, and identification of additional proteins in the pathway common to the proteins described herein.

L12 ANSWER 26 OF 30 USPATFULL on STN

AN 2002:73343 USPATFULL

TI Protein-protein interactions in neurodegenerative disorders

IN Roch, Jean-Marc, Salt Lake City, UT, UNITED STATES

Bartel, Paul L., Salt Lake City, UT, UNITED STATES

PA Myriad Genetics, Inc., Salt Lake City, UT (U.S. corporation)

PI US 2002040484 A1 20020404

AI US 2001-948904 A1 20010910 (9)

RLI Division of Ser. No. US 1999-466139, filed on 21 Dec 1999, PENDING

PRAI US 1998-113534P 19981222 (60)

US 1999-124120P 19990312 (60)

US 1999-141243P 19990630 (60)

DT Utility

FS APPLICATION

LREP ROTHWELL, FIGG, ERNST & MANBECK, P.C., 555 13TH STREET, N.W., SUITE 701, EAST TOWER, WASHINGTON, DC, 20004

CLMN Number of Claims: 42

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 3069

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to the discovery of protein-protein interactions that are involved in the pathogenesis of neurodegenerative disorders, including Alzheimer's disease (AD). Thus, the present invention is directed to complexes of these proteins and/or their fragments, antibodies to the complexes, diagnosis of neurodegenerative disorders (including diagnosis of a predisposition to and diagnosis of the existence of the disorder), drug screening for agents which modulate the interaction of proteins described herein, and identification of additional proteins in the pathway common to the proteins described herein.

L12 ANSWER 27 OF 30 USPATFULL on STN

AN 2002:16894 USPATFULL

TI 18036,a novel calpain-like protease and uses thereof

IN Kapeller-Libermann, Rosana, Chestnut Hill, MA, UNITED STATES

PA Millennium Pharmaceuticals, Inc. (U.S. corporation)

PI US 2002009774 A1 20020124

US 6620592 B2 20030916

AI US 2001-794960 A1 20010226 (9)

PRAI US 2000-185333P 20000228 (60)

DT Utility

FS APPLICATION

LREP ALSTON & BIRD LLP, BANK OF AMERICA PLAZA, 101 SOUTH TRYON STREET, SUITE 4000, CHARLOTTE, NC, 28280-4000

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN 10 Drawing Page(s)

LN.CNT 3989

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel calpain-like protease **polypeptides**, proteins, and nucleic acid molecules are disclosed. In addition to isolated, full-length calpain-like protease proteins, the invention further provides isolated calpain-like protease fusion proteins, antigenic peptides, and anti-calpain-like protease antibodies. The invention also provides calpain-like protease nucleic acid molecules, recombinant expression vectors containing a nucleic acid molecule of the invention, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a calpain-like protease gene has been introduced or disrupted. Diagnostic, screening, and therapeutic methods utilizing compositions of the invention are also provided.

L12 ANSWER 28 OF 30 USPATFULL on STN

AN 2002:201870 USPATFULL

TI Growth factor homolog ZVEGF3

IN Gao, Zeren, Redmond, WA, United States

Hart, Charles E., Woodinville, WA, United States

Piddington, Christopher S., Thousand Oaks, CA, United States

Sheppard, Paul O., Granite Falls, WA, United States

Shoemaker, Kimberly E., Bellevue, WA, United States

Gilbertson, Debra G., Seattle, WA, United States

West, James W., Seattle, WA, United States

PA ZymoGenetics, Inc., Seattle, WA, United States (U.S. corporation)

PI US 6432673 B1 20020813

AI US 1999-457066 19991207 (9)

PRAI US 1998-111173P 19981207 (60)

US 1999-142576P 19990706 (60)

US 1999-161653P 19991021 (60)

US 1999-165255P 19991112 (60)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Spector, Lorraine; Assistant Examiner: Jiang, Dong

LREP Parker, Gary E.

CLMN Number of Claims: 26

ECL Exemplary Claim: 1,8

DRWN 12 Drawing Figure(s); 12 Drawing Page(s)

LN.CNT 4888

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Polypeptide growth factors, methods of making them, polynucleotides encoding them, antibodies to them, and methods of using them are disclosed. The polypeptides comprise an amino acid segment that is at least 90% identical to residues 46-163 of SEQ ID NO:2 or residues 235-345 of SEQ ID NO:2. Multimers of the polypeptides are also disclosed. The polypeptides, multimeric proteins, and polynucleotides can be used in the study and regulation of cell and tissue development, as components of cell culture media, and as diagnostic agents.

L12 ANSWER 29 OF 30 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation on STN

AN 1999:230473 SCISEARCH

GA The Genuine Article (R) Number: 178LU

TI The cell death-promoting gene DP5, which interacts with the BCL2 family, is induced during neuronal apoptosis following exposure to amyloid beta protein

AU Imaizumi K (Reprint); Morihara T; Mori Y; Katayama T; Tsuda M; Furuyama T; Wanaka A; Takeda M; Tohyama M

CS Osaka Univ, Sch Med, Dept Anat & Neurosci, 2-2 Yamadaoka, Suita, Osaka 5650871, Japan (Reprint); Osaka Univ, Sch Med, Dept Anat & Neurosci, Suita, Osaka 5650871, Japan; Osaka Univ, Sch Med, Dept Neuropsychiat, Suita, Osaka 5650871, Japan; Tanabe Seiyaku Co Ltd, Yodogawa Ku, Osaka 5320031, Japan; Fukushima Med Coll, Inst Biomed Sci, Fukushima 9601247, Japan; CREST, Kawaguchi 3320012, Japan

CYA Japan

SO JOURNAL OF BIOLOGICAL CHEMISTRY, (19 MAR 1999) Vol. 274, No. 12, pp. 7975-7981.  
ISSN: 0021-9258.

PB AMER SOC BIOCHEMISTRY MOLECULAR BIOLOGY INC, 9650 ROCKVILLE PIKE, BETHESDA, MD 20814 USA.

DT Article; Journal

LA English

REC Reference Count: 32

ED Entered STN: 1999

Last Updated on STN: 1999

\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

AB DP5, which contains a BH3 domain, was cloned as a neuronal apoptosis-inducing gene. To confirm that DP5 interacts with members of the Bcl-2 family, 293T cells were transiently co-transfected with DP5 and Bcl-x1 cDNA constructs, and immunoprecipitation was carried out. The 30-kDa Bcl-x1 was co-immunoprecipitated with Myc-tagged DP5, suggesting that DP5 physically interacts with Bcl-x1 in mammalian cells. Previously, we reported that DP5 is induced during neuronal apoptosis in cultured sympathetic neurons. Here, we analyzed DP5 gene expression and the specific interaction of DP5 with Bcl-x1 during neuronal death induced by amyloid-beta protein (A beta), DP5 mRNA was induced 6 h after treatment with A beta in cultured rat cortical neurons. The protein encoded by DP5 mRNA showed a specific interaction with Bcl-x1. Induction of DP5 gene expression was blocked by nifedipine, an inhibitor of L-type voltage-dependent calcium channels, and dantrolene, an inhibitor of calcium release from the endoplasmic reticulum. These results suggested that the induction of DP5 mRNA occurs downstream of the increase in cytosolic calcium concentration caused by A beta. Moreover, DP5 specifically interacts with Bcl-x1 during neuronal apoptosis following exposure to A beta, and its binding could impair the survival-promoting activities of Bcl-x1. Thus, the induction of DP5 mRNA and the interaction of DP5 and Bcl-x1 could play significant roles in neuronal degeneration following exposure to A beta.

L12 ANSWER 30 OF 30 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1

AN 1999:509243 CAPLUS

DN 131:307798

TI Identification of 30 kDa protein for Ca<sup>2+</sup> releasing action of myotoxin A with a mechanism common to DIDS in skeletal muscle sarcoplasmic reticulum

AU Hirata, Y.; Nakahata, N.; Ohkura, M.; Ohizumi, Y.

CS Faculty of Pharmaceutical Sciences, Department of Pharmaceutical Molecular Biology, Tohoku University, Sendai, Japan

SO Biochimica et Biophysica Acta, Molecular Cell Research (1999), 1451(1),  
132-140  
CODEN: BBAMCO; ISSN: 0167-4889  
PB Elsevier B.V.  
DT Journal  
LA English  
AB The mol. mechanism of Ca release by myotoxin a (MYTX), a  
**polypeptide** toxin isolated from the venom of prairie rattlesnakes  
(Crotalus viridis viridis), was investigated in the heavy fraction of  
sarcoplasmic reticulum (HSR) of rabbit skeletal muscles. [125I]MYTX bound  
to four HSR proteins (106, 74, 53 and 30 kDa) on  
polyvinylidene difluoride (PVDF) membrane. DIDS, 4,4'-  
diisothiocyanatostilbene-2,2'-disulfonic acid, bound predominantly to  
30 kDa protein on the PVDF membrane, the mol. weight of  
which was similar to one of the MYTX binding proteins. The maximum 45Ca<sup>2+</sup>  
release induced by caffeine (30 mM) was further increased in the presence  
of MYTX (10 µM) or DIDS (30 µM), whereas that induced by DIDS (30  
µM) was not affected by MYTX (10 µM). MYTX inhibited [3H]DIDS  
binding to HSR in a concentration-dependent manner. Furthermore, [125I]MYTX  
binding to 30 kDa protein was inhibited by DIDS in a  
concentration-dependent manner. These results suggest that MYTX and DIDS release  
Ca<sup>2+</sup> from HSR in a common mechanism. The 30 kDa  
protein may be a target protein for the Ca<sup>2+</sup> releasing action of MYTX and  
DIDS.

RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s (calcium release?) and polypeptide? and ((150 kda)or(150 kilodalton?)or(150,000 dalton?))  
L14 18 (CALCIUM RELEASE?) AND POLYPEPTIDE? AND ((150 KDA) OR(150 KILODA  
LTON?) OR(150,000 DALTON?))

=> dup rem l14  
PROCESSING COMPLETED FOR L14  
L15 18 DUP REM L14 (0 DUPLICATES REMOVED)

=> d bib ab 1-  
YOU HAVE REQUESTED DATA FROM 18 ANSWERS - CONTINUE? Y/(N):y

L15 ANSWER 1 OF 18 USPATFULL on STN  
AN 2005:330188 USPATFULL  
TI Mycoplasma **polypeptides**  
IN Hsu, Walter H., 2725 Northridge Circle, Ames, IA, UNITED STATES 50014  
Young, Theresa F., Carlsbad, CA, UNITED STATES  
Ross, Richard F., Ames, IA, UNITED STATES  
Zhou, En-Min, Ames, IA, UNITED STATES  
PA Iowa State University Research Foundation, Inc., Ames, IA, UNITED  
STATES, 50011-2131 (U.S. corporation)  
PI US 2005287163 A1 20051229  
AI US 2003-509926 A1 20030404 (10)  
WO 2003-US10305 20030404  
20050729 PCT 371 date  
PRAI US 2003-370344P 20020405 (60)  
DT Utility  
FS APPLICATION  
LREP FISH & RICHARDSON P.C., PO BOX 1022, MINNEAPOLIS, MN, 55440-1022, US  
CLMN Number of Claims: 33  
ECL Exemplary Claim: 1  
DRWN 15 Drawing Page(s)  
LN.CNT 1268

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides methods and materials related to mycoplasma. For  
example, the invention provides mycoplasma **polypeptides** having  
the ability to increase **calcium release** from cells  
(e.g., porcine ciliated tracheal cells) as well as antibodies that bind  
to such mycoplasma **polypeptides**. In addition, the invention  
provides methods for identifying inhibitors of mycoplasma-induced  
**calcium release** from porcine ciliated tracheal cells.

L15 ANSWER 2 OF 18 USPATFULL on STN  
 AN 2005:189432 USPATFULL  
 TI Nucleic acid molecule encoding homer 1B protein  
 IN Worley, Paul F., Baltimore, MD, UNITED STATES  
 Tu, Jian Cheng, Baltimore, MD, UNITED STATES  
 Xiao, Bo, Ellicott City, MD, UNITED STATES  
 Leahy, Daniel, Baltimore, MD, UNITED STATES  
 Beneken, Jutta, Baltimore, MD, UNITED STATES  
 Lanahan, Anthony A., Baltimore, MD, UNITED STATES  
 Brakeman, Paul R., Baltimore, MD, UNITED STATES  
 PI US 2005164344 A1 20050728  
 AI US 2004-8889 A1 20041210 (11)  
 RLI Division of Ser. No. US 2002-192381, filed on 9 Jul 2002, GRANTED, Pat.  
 No. US 6864083 Division of Ser. No. US 1999-377285, filed on 18 Aug  
 1999, GRANTED, Pat. No. US 6720175  
 PRAI US 1999-138494P 19990610 (60)  
 US 1999-138493P 19990610 (60)  
 US 1999-138426P 19990610 (60)  
 US 1998-97334P 19980818 (60)  
 DT Utility  
 FS APPLICATION  
 LREP Lisa A. Haile, J.D., Ph.D., GRAY CARY WARE & FREIDENRICH LLP, 4365  
 Executive Drive, Suite 1100, San Diego, CA, 92121-2133, US  
 CLMN Number of Claims: 6  
 ECL Exemplary Claim: 1-7  
 DRWN 55 Drawing Page(s)  
 LN.CNT 7396  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB A method is provided for identifying a compound that modulates a  
 cellular response associated with Homer and mediated by a cell-surface  
 or an intracellular receptor. A method is further provided for  
 identifying a compound that modulates receptor activated calcium  
 mobilization associated with Homer. A method is provided for identifying  
 a compound that inhibits Homer protein activity based on the crystal  
 structure coordinates of Homer protein binding domain. A method is also  
 provided for identifying a compound that affects the formation of cell  
 surface receptors into clusters. Also provided are nucleic acids  
 encoding Homer proteins as well as Homer proteins, and Homer interacting  
 proteins.

L15 ANSWER 3 OF 18 USPATFULL on STN  
 AN 2005:111533 USPATFULL  
 TI 70 human secreted proteins  
 IN Ruben, Steven M., Brookeville, MD, UNITED STATES  
 Young, Paul E., Gaithersburg, MD, UNITED STATES  
 Brewer, Laurie A., St. Paul, MN, UNITED STATES  
 Ebner, Reinhard, Gaithersburg, MD, UNITED STATES  
 Olsen, Henrik S., Gaithersburg, MD, UNITED STATES  
 Florence, Kimberly A., Rockville, MD, UNITED STATES  
 Rosen, Craig A., Laytonsville, MD, UNITED STATES  
 Duan, Roxanne D., Gaithersburg, MD, UNITED STATES  
 Moore, Paul A., North Bethesda, MD, UNITED STATES  
 Shi, Yanggu, Gaithersburg, MD, UNITED STATES  
 LaFleur, David W., Washington, DC, UNITED STATES  
 Florence, Charles, Rockville, MD, UNITED STATES  
 Soppet, Daniel R., Centreville, VA, UNITED STATES  
 Endress, Gregory A., Florence, MA, UNITED STATES  
 Feng, Ping, Germantown, MD, UNITED STATES  
 Komatsoulis, George A., Silver Spring, MD, UNITED STATES  
 PA Human Genome Sciences, Inc., Rockville, MD, UNITED STATES (U.S.  
 corporation)  
 PI US 2005095612 A1 20050505  
 AI US 2004-866831 A1 20040615 (10)  
 RLI Division of Ser. No. US 2002-144929, filed on 15 May 2002, PENDING  
 Continuation of Ser. No. US 2000-716128, filed on 17 Nov 2000, ABANDONED  
 Continuation of Ser. No. US 1999-251329, filed on 17 Feb 1999, ABANDONED  
 Continuation-in-part of Ser. No. WO 1998-US17044, filed on 18 Aug 1998,  
 PENDING  
 PRAI US 1997-56369P 19970819 (60)

US 1997-56535P 19970819 (60)  
US 1997-56556P 19970819 (60)  
US 1997-56555P 19970819 (60)  
US 1997-56726P 19970819 (60)  
US 1997-56368P 19970819 (60)  
US 1997-56728P 19970819 (60)  
US 1997-56628P 19970819 (60)  
US 1997-56629P 19970819 (60)  
US 1998-89510P 19980616 (60)  
US 1998-92956P 19980715 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, INTELLECTUAL PROPERTY DEPT., 14200 SHADY GROVE ROAD, ROCKVILLE, MD, 20850, US

CLMN Number of Claims: 24

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 12243

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to these novel human secreted proteins.

L15 ANSWER 4 OF 18 USPATFULL on STN

AN 2004:335789 USPATFULL

TI Conductance of improperly folded proteins through the secretory pathway and related methods for treating disease

IN Caplan, Michael J., Woodbridge, CT, UNITED STATES

Egan, Marie E., Madison, CT, UNITED STATES

PA Yale University (U.S. corporation)

PI US 2004266883 A1 20041230

AI US 2004-798534 A1 20040311 (10)

RLI Continuation-in-part of Ser. No. US 2003-341741, filed on 14 Jan 2003, PENDING Continuation-in-part of Ser. No. US 2002-200607, filed on 22 Jul 2002, PENDING Continuation-in-part of Ser. No. US 2001-976963, filed on 12 Oct 2001, PENDING Continuation-in-part of Ser. No. US 1999-427696, filed on 27 Oct 1999, GRANTED, Pat. No. US 6344475

DT Utility

FS APPLICATION

LREP Monica R. Gerber, M.D., Ph.D., Choate, Hall & Stewart, Exchange Place, 53 State Street, Boston, MA, 02109

CLMN Number of Claims: 62

ECL Exemplary Claim: 1

DRWN 16 Drawing Page(s)

LN.CNT 4567

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides the methodology and agents for treating any disease or clinical condition which is at least partly the result of endoplasmic reticulum-associated retention of proteins. Thus, the methods and agents of the present invention provide for the release of normally retained proteins from the endoplasmic reticulum. The present invention is particularly useful for treating any disease or clinical condition which is at least partly the result of endoplasmic reticulum-associated retention or degradation of mis-assembled or mis-folded proteins. In certain embodiments of the invention the agents include at least one curcuminoid.

L15 ANSWER 5 OF 18 USPATFULL on STN

AN 2004:133338 USPATFULL

TI Targets for therapeutic intervention identified in the mitochondrial proteome

IN Ghosh, Soumitra S., San Diego, CA, UNITED STATES

Fahy, Eoin D., San Diego, CA, UNITED STATES

Zhang, Bing, Spring, TX, UNITED STATES

Gibson, Bradford W., Berkeley, CA, UNITED STATES

Taylor, Steven W., San Diego, CA, UNITED STATES  
 Glenn, Gary M., Encinitas, CA, UNITED STATES  
 Warnock, Dale E., San Diego, CA, UNITED STATES  
 Gaucher, Sara P., Castro Valley, CA, UNITED STATES  
 PA MitoKor Inc., San Diego, CA, UNITED STATES, 92121 (U.S. corporation)  
 The Buck Institute for Age Research, Novato, CA, UNITED STATES,  
 94948-0638 (U.S. corporation)  
 PI US 2004101874 A1 20040527  
 AI US 2003-408765 A1 20030404 (10)  
 PRAI US 2002-412418P 20020920 (60)  
 US 2002-389987P 20020617 (60)  
 US 2002-372843P 20020412 (60)  
 DT Utility  
 FS APPLICATION  
 LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,  
 SEATTLE, WA, 98104-7092  
 CLMN Number of Claims: 19  
 ECL Exemplary Claim: 1  
 DRWN 5 Drawing Page(s)  
 LN.CNT 5998  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB Mitochondrial targets for drug screening assays and for therapeutic  
 intervention in the treatment of diseases associated with altered  
 mitochondrial function are provided. Complete amino acid sequences [SEQ  
 ID NOS:1-3025] of **polypeptides** that comprise the human heart  
 mitochondrial proteome are provided, using fractionated proteins derived  
 from highly purified mitochondrial preparations, to identify previously  
 unrecognized mitochondrial molecular components.  
 L15 ANSWER 6 OF 18 USPATFULL on STN  
 AN 2004:13595 USPATFULL  
 TI Novel proteins and nucleic acids encoding same  
 IN Zerhusen, Bryan D., Branford, CT, UNITED STATES  
 Padigar, Muralidhara, Branford, CT, UNITED STATES  
 Spytek, Kimberly, New Haven, CT, UNITED STATES  
 Spaderna, Steven, Berlin, CT, UNITED STATES  
 Gangolli, Esha A., Branford, CT, UNITED STATES  
 Rastelli, Luca, Guilford, CT, UNITED STATES  
 Burgess, Catherine E., Wethersfield, CT, UNITED STATES  
 Majumder, Kumud, Stamford, CT, UNITED STATES  
 Shinkets, Richard, West Haven, CT, UNITED STATES  
 Mishra, Vishnu, Branford, CT, UNITED STATES  
 Vernet, Corine, North Branford, CT, UNITED STATES  
 Szekeres, Edward S., Branford, CT, UNITED STATES  
 Grosse, William M., Branford, CT, UNITED STATES  
 Alsobrook, John P., II, Madison, CT, UNITED STATES  
 Liu, Xiaohong, Branford, CT, UNITED STATES  
 Gerlach, Valerie L., Branford, CT, UNITED STATES  
 Ellerman, Karen, Branford, CT, UNITED STATES  
 Smithson, Glennda, Branford, CT, UNITED STATES  
 Peyman, John, New Haven, CT, UNITED STATES  
 Stone, David, Guilford, CT, UNITED STATES  
 MacDougall, John, Hamden, CT, UNITED STATES  
 PI US 2004010118 A1 20040115  
 AI US 2001-930512 A1 20010815 (9)  
 PRAI US 2000-225692P 20000816 (60)  
 US 2000-225693P 20000816 (60)  
 US 2000-225837P 20000816 (60)  
 US 2000-226236P 20000818 (60)  
 US 2000-226353P 20000818 (60)  
 US 2000-227085P 20000822 (60)  
 US 2000-227395P 20000823 (60)  
 US 2000-227492P 20000824 (60)  
 US 2000-227600P 20000824 (60)  
 US 2001-275952P 20010314 (60)  
 DT Utility  
 FS APPLICATION  
 LREP MINTZ, LEVIN, COHN, FERRIS, GLOVSKY, AND POPEO, P.C., ONE FINANCIAL  
 CENTER, BOSTON, MA, 02111



CLMN Number of Claims: 49

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 9358

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed herein are nucleic acid sequences that encode novel **polypeptides**. Also disclosed are **polypeptides** encoded by these nucleic acid sequences, and antibodies, which immunospecifically-bind to the **polypeptide**, as well as derivatives, variants, mutants, or fragments of the aforementioned **polypeptide**, polynucleotide, or antibody. The invention further discloses therapeutic, diagnostic and research methods for diagnosis, treatment, and prevention of disorders involving any one of these novel human nucleic acids and proteins.

L15 ANSWER 7 OF 18 USPATFULL on STN

AN 2004:90636 USPATFULL

TI Nucleic acid molecule encoding homer 1B protein

IN Worley, Paul F., Baltimore, MD, United States

Tu, Jian Cheng, Baltimore, MD, United States

Xiao, Bo, Ellicott City, MD, United States

Leahy, Daniel, Baltimore, MD, United States

Beneken, Jutta, Baltimore, MD, United States

Lanahan, Anthony A., Baltimore, MD, United States

Brakeman, Paul R., Baltimore, MD, United States

PA The Johns Hopkins University School of Medicine, Baltimore, MD, United States (U.S. corporation)

PI US 6720175 B1 20040413

AI US 1999-377285 19990818 (9)

PRAI US 1998-97334P 19980818 (60)

US 1999-138426P 19990610 (60)

US 1999-138493P 19990610 (60)

US 1999-138494P 19990610 (60)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Kemmerer, Elizabeth; Assistant Examiner: Bunner, Bridget E.

LREP Gray Cary Ware & Freidenrich LLP, Haile, Lisa A.

CLMN Number of Claims: 7

ECL Exemplary Claim: 1

DRWN 63 Drawing Figure(s); 55 Drawing Page(s)

LN.CNT 7496

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is provided for identifying a compound that modulates a cellular response associated with Homer and mediated by a cell-surface or an intracellular receptor. A method is further provided for identifying a compound that modulates receptor activated calcium mobilization associated with Homer. A method is provided for identifying a compound that inhibits Homer protein activity based on the crystal structure coordinates of Homer protein binding domain. A method is also provided for identifying a compound that affects the formation of cell surface receptors into clusters. Also provided are nucleic acids encoding Homer proteins as well as Homer proteins, and Homer interacting proteins.

L15 ANSWER 8 OF 18 USPATFULL on STN

AN 2004:66006 USPATFULL

TI DNA array sequence selection

IN Lorenz, Matthias, Bethesda, MD, United States

PA The United States of America as represented by the Department of Health and Human Services, Washington, DC, United States (U.S. government)

PI US 6706867 B1 20040316

AI US 2000-741238 20001219 (9)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Horlick, Kenneth R.; Assistant Examiner: Wilder, Cynthia

LREP Leydig, Voit & Mayer, Ltd.

CLMN Number of Claims: 8

ECL Exemplary Claim: 1  
DRWN 3 Drawing Figure(s); 29 Drawing Page(s)  
LN.CNT 23532

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides methods and compositions for the construction of custom cDNA microarrays. In particular, the methods involve the selection of relevant clusters based on knowledge and expression patterns using public database information and the identification of the best representative cDNA clones within the selected cluster. The methods facilitate the construction of custom microarrays suitable for use in any biotechnological art. In preferred embodiments, the present invention provides the the ImmunoChip.

L15 ANSWER 9 OF 18 USPATFULL on STN

AN 2003:335422 USPATFULL

TI Conductance of improperly folded proteins through the secretory pathway and related methods for treating disease

IN Caplan, Michael J., Woodbridge, CT, UNITED STATES

Egan, Marie E., Madison, CT, UNITED STATES

PA Yale University (U.S. corporation)

PI US 2003236300 A1 20031225

AI US 2003-341741 A1 20030114 (10)

RLI Continuation-in-part of Ser. No. US 2002-200607, filed on 22 Jul 2002, PENDING Continuation-in-part of Ser. No. US 2001-976963, filed on 12 Oct 2001, PENDING Continuation-in-part of Ser. No. US 1999-427696, filed on 27 Oct 1999, GRANTED, Pat. No. US 6344475

DT Utility

FS APPLICATION

LREP Choate, Hall & Stewart, Exchange Place, 53 State Street, Boston, MA, 02109

CLMN Number of Claims: 78

ECL Exemplary Claim: 1

DRWN 10 Drawing Page(s)

LN.CNT 3875

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides the methodology and agents for treating any disease or clinical condition which is at least partly the result of endoplasmic reticulum-associated retention of proteins. Thus, the methods and agents of the present invention provide for the release of normally retained proteins from the endoplasmic reticulum. The present invention is particularly useful for treating any disease or clinical condition which is at least partly the result of endoplasmic reticulum-associated retention or degradation of mis-assembled or mis-folded proteins.

L15 ANSWER 10 OF 18 USPATFULL on STN

AN 2003:244398 USPATFULL

TI Nucleic acid molecule encoding homer 1b protein

IN Worley, Paul F., Baltimore, MD, UNITED STATES

Tu, Jian Cheng, Towson, MD, UNITED STATES

Xiao, Bo, Ellicott City, MD, UNITED STATES

Leahy, Daniel, Baltimore, MD, UNITED STATES

Beneken, Jutta, Baltimore, MD, UNITED STATES

Lanahan, Anthony A., Baltimore, MD, UNITED STATES

Brakeman, Paul R., Baltimore, MD, UNITED STATES

PA The Johns Hopkins University School of Medicine (U.S. corporation)

PI US 2003170807 A1 20030911

US 6864083 B2 20050308

AI US 2002-192381 A1 20020709 (10)

RLI Division of Ser. No. US 1999-377285, filed on 18 Aug 1999, ABANDONED

PRAI US 1998-97334P 19980818 (60)

US 1999-138426P 19990610 (60)

US 1999-138493P 19990610 (60)

US 1999-138494P 19990610 (60)

DT Utility

FS APPLICATION

LREP Lisa A. Haile, Ph.D., Gray Cary Ware & Freidenrich LLP, Suite 1100, 4365 Executive Drive, San Diego, CA, 92121-2133

CLMN Number of Claims: 9

ECL Exemplary Claim: 1  
DRWN 55 Drawing Page(s)  
LN.CNT 7687

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is provided for identifying a compound that modulates a cellular response associated with Homer and mediated by a cell-surface or an intracellular receptor. A method is further provided for identifying a compound that modulates receptor activated calcium mobilization associated with Homer. A method is provided for identifying a compound that inhibits Homer protein activity based on the crystal structure coordinates of Homer protein binding domain. A method is also provided for identifying a compound that affects the formation of cell surface receptors into clusters. Also provided are nucleic acids encoding Homer proteins as well as Homer proteins, and Homer interacting proteins.

L15 ANSWER 11 OF 18 USPATFULL on STN

AN 2003:231611 USPATFULL

TI Compositions and methods for the transport of biologically active agents across cellular barriers

IN Houston, L. L., Del Mar, CA, UNITED STATES  
Sheridan, Philip J., San Diego, CA, UNITED STATES  
Hawley, Stephen B., San Diego, CA, UNITED STATES  
Glynn, Jacqueline M., San Diego, CA, UNITED STATES  
Chapin, Steven, San Diego, CA, UNITED STATES

PI US 2003161809 A1 20030828

AI US 2001-969748 A1 20011002 (9)

PRAI US 2000-237929P 20001002 (60)

US 2000-248478P 20001113 (60)

US 2000-248819P 20001114 (60)

US 2001-267601P 20010209 (60)

DT Utility

FS APPLICATION

LREP FOLEY & LARDNER, P.O. BOX 80278, SAN DIEGO, CA, 92138-0278

CLMN Number of Claims: 53

ECL Exemplary Claim: 1

DRWN 32 Drawing Page(s)

LN.CNT 11304

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed herein are complexes and compounds that pass through cellular barriers to deliver compounds into, through and out of cells, and methods of producing and using such complexes and compounds. The complexes and compounds of the invention comprise a biologically active portion and a targeting element directed to a ligand that confers transcellular, transcytotic or paracellular transporting properties to an agent specifically bound to the ligand, with the proviso that the targeting element is not an antibody. Also disclosed are complexes and compounds that comprise two or more targeting elements directed to a ligand that confers transcellular, transcytotic or paracellular transporting properties to an agent specifically bound to the ligand. Preferred ligands include but are not limited to the stalk of pIgR, a pIgR domain, an amino acid sequence that is conserved among pIgR's from different animals, and one of several regions of pIgR defined herein.

L15 ANSWER 12 OF 18 USPATFULL on STN

AN 2003:220740 USPATFULL

TI Methods and compositions for diagnosing and treating rheumatoid arthritis

IN Pittman, Debra D., Windham, NH, UNITED STATES  
Feldman, Jeffrey L., Arlington, MA, UNITED STATES  
Shields, Kathleen M., Harvard, MA, UNITED STATES  
Trepicchio, William L., Andover, MA, UNITED STATES

PI US 2003154032 A1 20030814

AI US 2001-23451 A1 20011217 (10)

PRAI US 2000-255861P 20001215 (60)

DT Utility

FS APPLICATION

LREP Patent Group, FOLEY, HOAG & ELIOT LLP, One Post Office Square, Boxton, MA, 02109

CLMN Number of Claims: 40

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 25385

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides methods and compositions for diagnostic assays for detecting R.A. and therapeutic methods and compositions for treating R.A. The invention also provides methods for designing, identifying, and optimizing therapeutics for R.A. Diagnostic compositions of the invention include compositions comprising detection agents for detecting one or more genes that have been shown to be up- or down-regulated in cells of R.A. relative to normal counterpart cells. Exemplary detection agents include nucleic acid probes, which can be in solution or attached to a solid surface, e.g., in the form of a microarray. The invention also provides computer-readable media comprising values of levels of expression of one or more genes that are up- or down-regulated in R.A.

L15 ANSWER 13 OF 18 USPATFULL on STN

AN 2003:214470 USPATFULL

TI Conductance of improperly folded proteins through the secretory pathway and related methods for treating disease

IN Caplan, Michael J., Woodbridge, CT, UNITED STATES

Egan, Marie E., Madison, CT, UNITED STATES

PI US 2003149113 A1 20030807

AI US 2002-200607 A1 20020722 (10)

RLI Continuation-in-part of Ser. No. US 2001-976963, filed on 12 Oct 2001, PENDING

DT Utility

FS APPLICATION

LREP Choate, Hall & Stewart, Exchange Place, 53 State Street, Boston, MA, 02109

CLMN Number of Claims: 36

ECL Exemplary Claim: 1

DRWN 10 Drawing Page(s)

LN.CNT 3129

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides the methodology and agents for treating any disease or clinical condition which is at least partly the result of endoplasmic reticulum-associated retention of proteins. Thus, the methods and agents of the present invention provide for the release of normally retained proteins from the endoplasmic reticulum. The present invention is particularly useful for treating any disease or clinical condition which is at least partly the result of endoplasmic reticulum-associated retention or degradation of mis-assembled or mis-folded proteins.

L15 ANSWER 14 OF 18 USPATFULL on STN

AN 2003:100294 USPATFULL

TI 70 human secreted proteins

IN Ruben, Steven M., Olney, MD, UNITED STATES

Young, Paul E., Gaithersburg, MD, UNITED STATES

Brewer, Laurie A., St. Paul, MN, UNITED STATES

Ebner, Reinhard, Gaithersburg, MD, UNITED STATES

Olsen, Henrik S., Gaithersburg, MD, UNITED STATES

Florence, Kimberly A., Rockville, MD, UNITED STATES

Rosen, Craig A., Laytonsville, MD, UNITED STATES

Duan, Roxanne D., Bethesda, MD, UNITED STATES

Moore, Paul A., Germantown, MD, UNITED STATES

Shi, Yanggu, Gaithersburg, MD, UNITED STATES

LaFleur, David W., Washington, DC, UNITED STATES

Florence, Charles, Rockville, MD, UNITED STATES

Soppet, Daniel R., Centreville, VA, UNITED STATES

Endress, Gregory A., Florence, MA, UNITED STATES

Feng, Ping, Germantown, MD, UNITED STATES

Komatsoulis, George A., Silver Spring, MD, UNITED STATES

PA Human Genome Sciences, Inc., Rockville, MD (U.S. corporation)

PI US 2003069405 A1 20030410

US 2004014954 A9 20040122

US 6881823 B2 20050419

AI US 2002-144929 A1 20020515 (10)

RLI Continuation of Ser. No. US 2000-716128, filed on 17 Nov 2000, PENDING  
Continuation of Ser. No. US 1999-251329, filed on 17 Feb 1999, ABANDONED  
Continuation-in-part of Ser. No. WO 1998-US17044, filed on 18 Aug 1998,  
UNKNOWN

PRAI US 1997-56369P 19970819 (60)  
US 1997-56535P 19970819 (60)  
US 1997-56556P 19970819 (60)  
US 1997-56555P 19970819 (60)  
US 1997-56726P 19970819 (60)  
US 1997-56368P 19970819 (60)  
US 1997-56728P 19970819 (60)  
US 1997-56628P 19970819 (60)  
US 1997-56629P 19970819 (60)  
US 1998-89510P 19980616 (60)  
US 1998-92956P 19980715 (60)

DT Utility  
FS APPLICATION  
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850  
CLMN Number of Claims: 3  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 12259  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to these novel human secreted proteins.

L15 ANSWER 15 OF 18 USPATFULL on STN  
AN 2002:314728 USPATFULL  
TI Mammalian alpha-kinase proteins, nucleic acids and diagnostic and therapeutic uses thereof  
IN Ryazanov, Alexey, Princeton, NJ, UNITED STATES  
PI US 2002177205 A1 20021128  
AI US 2001-832292 A1 20010410 (9)  
RLI Continuation-in-part of Ser. No. US 2000-632131, filed on 3 Aug 2000, PENDING  
DT Utility  
FS APPLICATION  
LREP KLAUBER & JACKSON, 411 HACKENSACK AVENUE, HACKENSACK, NJ, 07601  
CLMN Number of Claims: 48  
ECL Exemplary Claim: 1  
DRWN 34 Drawing Page(s)  
LN.CNT 3465  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides novel mammalian alpha-kinase proteins: melanoma alpha-kinase (MK), heart alpha-kinase (HK), kidney alpha-kinase (KK), skeletal muscle alpha-kinase (SK), and lymphocyte alpha-kinase (LK). In particular, a novel kinase type is herein provided, characterized by the presence of an alpha-kinase catalytic domain and an ion channel domain. Isolated nucleic acids of the alpha-kinases MK, HK, KK, SK and LK are provided. Methods for making the novel alpha-kinases, cells that express the alpha-kinases and methods for treating an animal in need of either increased or decreased activity of the alpha- kinases are provided.

L15 ANSWER 16 OF 18 USPATFULL on STN  
AN 2002:243579 USPATFULL  
TI Conductance of improperly folded proteins through the secretory pathway and related methods for treating disease  
IN Caplan, Michael T., Woodbridge, CT, UNITED STATES  
Egan, Marie E., Madison, CT, UNITED STATES  
PI US 2002132770 A1 20020919  
US 6753343 B2 20040622  
AI US 2001-976963 A1 20011012 (9)  
RLI Continuation-in-part of Ser. No. US 1999-427696, filed on 27 Oct 1999,

GRANTED, Pat. No. US 6344475  
DT Utility  
FS APPLICATION  
LREP Choate, Hall & Stewart, Exchange Place, 53 State Street, Boston, MA,  
02109  
CLMN Number of Claims: 56  
ECL Exemplary Claim: 1  
DRWN 8 Drawing Page(s)  
LN.CNT 2758

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides the methodology and agents for treating any disease or clinical condition which is at least partly the result of endoplasmic reticulum-associated retention of proteins. Thus, the methods and agents of the present invention provide for the release of normally retained proteins from the endoplasmic reticulum. The present invention is particularly useful for treating any disease or clinical condition which is at least partly the result of endoplasmic reticulum-associated retention or degradation of mis-assembled or mis-folded proteins.

L15 ANSWER 17 OF 18 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation on STN

AN 1991:310786 SCISEARCH

GA The Genuine Article (R) Number: FN132

TI INVOLVEMENT OF PROTEIN-PHOSPHORYLATION IN ACTIVATION OF CA2+ EFFLUX FROM SARCOPLASMIC-RETICULUM

AU GECHTMAN Z (Reprint); ORR I; SHOSHANBARMATZ V

CS BEN GURION UNIV NEGEV, DEPT BIOL, IL-84105 BEER SHEVA, ISRAEL

CYA ISRAEL

SO BIOCHEMICAL JOURNAL, (15 MAY 1991) Vol. 276, Part 1, pp. 97-102.  
ISSN: 0264-6021.

PB PORTLAND PRESS, 59 PORTLAND PLACE, LONDON, ENGLAND W1N 3AJ.

DT Article; Journal

FS LIFE

LA English

REC Reference Count: 31

ED Entered STN: 1994

Last Updated on STN: 1994

\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

AB Preincubation of sarcoplasmic reticulum (SR) membranes with a combination of ATP and NaF resulted in inhibition of Ca2+ accumulation and stimulation of Ca2+-ATPase and Ca2+ efflux. Under the same conditions, the activity of the SR phosphoprotein phosphatase was inhibited and the phosphorylation of two **polypeptides** with apparent molecular masses of 160 and 150 kDa was obtained. The effect of ATP is specific, since the ATP analogue adenosine 5'-[beta-gamma-imidol]triphosphate did not replace for ATP. In the absence of NaF, ATP was ineffective. The phosphorylation of the 160 kDa and/or 150 kDa proteins and the stimulation of Ca2+ efflux are clearly related. The phosphorylation of both proteins and the increase in Ca2+ efflux show a similar dependence on the concentration of ATP. The level of protein phosphorylation and the stimulation of Ca2+ efflux were also controlled by the NaF concentration which inhibits the phosphoprotein phosphatase. Similar concentrations of NaF were required for the inhibition of phosphoprotein phosphatase and of net Ca2+ accumulation, as well as for the stimulation of phosphorylation of both **polypeptides**. Quantitative analysis revealed a linear correlation between these three activities. Dicyclohexylcarbodi-imide, which inhibited Ca2+ efflux, also inhibited the phosphorylation of the two **polypeptides**. These results suggest the involvement of the phosphorylation/dephosphorylation of 160 kDa and/or 150 kDa **polypeptides** in the activation of Ca2+ release from SR membranes.

L15 ANSWER 18 OF 18 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation on STN

AN 1991:310785 SCISEARCH

GA The Genuine Article (R) Number: FN132

TI CHARACTERIZATION OF CA2+-DEPENDENT ENDOGENOUS PHOSPHORYLATION OF

160000-DALTON AND 150000-DALTON PROTEINS OF SARCOPLASMIC-RETICULUM  
AU ORR I (Reprint); GECHTMAN Z; SHOSHANBARMATZ V  
CS BEN GURION UNIV NEGEV, DEPT BIOL, IL-84105 BEER SHEVA, ISRAEL  
CYA ISRAEL  
SO BIOCHEMICAL JOURNAL, (15 MAY 1991) Vol. 276, Part 1, pp. 89-96.  
ISSN: 0264-6021.  
PB PORTLAND PRESS, 59 PORTLAND PLACE, LONDON, ENGLAND W1N 3AJ.  
DT Article; Journal  
FS LIFE  
LA English  
REC Reference Count: 44  
ED Entered STN: 1994  
Last Updated on STN: 1994  
\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

AB The 160 and 150 kDa proteins of sarcoplasmic reticulum (SR) are phosphorylated endogenously. The phosphorylation of both proteins has a marked requirement for  $\text{Ca}^{2+}$ . Half-maximal and maximal phosphorylation was obtained at about 1 nM- and 1- $\mu\text{M}$ - $\text{Ca}^{2+}$  respectively, and a Hill coefficient of about 0.5 was calculated. The phosphorylation is also dependent on NaF as an inhibitor of the SR phosphoprotein phosphatase. The phosphorylation of these proteins is very rapid, and maximal phosphorylation is achieved in less than 15 s. The phosphorylation of the 160 kDa and 150 kDa polypeptides is completely inhibited by 5 mM-MgCl<sub>2</sub> and by 75- $\mu\text{M}$ -LaCl<sub>3</sub>, by very low concentrations of different detergents, and by preincubation of the SR for 2 min at 60-degrees-C. The inhibition by  $\text{Mg}^{2+}$  is due to stimulation of ATP hydrolysis, thereby decreasing ATP concentration. Different phosphorylated peptides were obtained by digestion with protease V8 of the 160 kDa and 150 kDa protein bands, suggesting that the 160 kDa and kDa proteins are distinct. The two phosphorylated proteins are present in different fractions and preparations of SR, with or without [ $^3\text{H}$ ]-PN200-110 binding capacity. These and other results suggest that the phosphorylated SR proteins are distinct from the  $\alpha$ -1 and  $\alpha$ -2 subunits of voltage-gated  $\text{Ca}^{2+}$  channel of the T-system membranes. Different inhibitors and activators of protein kinase C and calmodulin-dependent protein kinase have no effect on the endogenous phosphorylation of both polypeptides, suggesting that the phosphorylation is regulated solely by  $\text{Ca}^{2+}$ . A possible regulatory function for this phosphorylation system is described in the accompanying paper [Gechtman, Orr & Shoshan-Barmatz (1991) Biochem. J. 276, 97-102].

s (calcium release) and polypeptide? and ((60 kda)or(60 kilodalton?)or(60,000 dalton?))  
L1 13 (CALCIUM RELEASE) AND POLYPEPTIDE? AND ((60 KDA) OR(60 KILODALTO  
N?) OR(60,000 DALTON?))

=> dup rem l1

PROCESSING COMPLETED FOR L1

L2 12 DUP REM L1 (1 DUPLICATE REMOVED)

=> d bib ab 1-

YOU HAVE REQUESTED DATA FROM 12 ANSWERS - CONTINUE? Y/(N):y

L2 ANSWER 1 OF 12 USPATFULL on STN

AN 2005:330188 USPATFULL

TI Mycoplasma **polypeptides**

IN Hsu, Walter H., 2725 Northridge Circle, Ames, IA, UNITED STATES 50014

Young, Theresa F., Carlsbad, CA, UNITED STATES

Ross, Richard F., Ames, IA, UNITED STATES

Zhou, En-Min, Ames, IA, UNITED STATES

PA Iowa State University Research Foundation, Inc., Ames, IA, UNITED STATES, 50011-2131 (U.S. corporation)

PI US 2005287163 A1 20051229

AI US 2003-509926 A1 20030404 (10)

WO 2003-US10305 20030404

20050729 PCT 371 date

PRAI US 2003-370344P 20020405 (60)

DT Utility

FS APPLICATION

LREP FISH & RICHARDSON P.C., PO BOX 1022, MINNEAPOLIS, MN, 55440-1022, US

CLMN Number of Claims: 33

ECL Exemplary Claim: 1

DRWN 15 Drawing Page(s)

LN.CNT 1268

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides methods and materials related to mycoplasma. For example, the invention provides mycoplasma **polypeptides** having the ability to increase **calcium release** from cells (e.g., porcine ciliated tracheal cells) as well as antibodies that bind to such mycoplasma **polypeptides**. In addition, the invention provides methods for identifying inhibitors of mycoplasma-induced **calcium release** from porcine ciliated tracheal cells.

L2 ANSWER 2 OF 12 USPATFULL on STN

AN 2005:318104 USPATFULL

TI Compositions and methods for enhanced mucosal delivery of parathyroid hormone

IN Quay, Steven C., Edmonds, WA, UNITED STATES

Costantino, Henry R., Woodinville, WA, UNITED STATES

Kleppe, Mary S., Snohomish, WA, UNITED STATES

Li, Ching-Yuan, Bellevue, WA, UNITED STATES

PA Natestch Pharmaceutical Company Inc. (U.S. corporation)

PI US 2005276843 A1 20051215

AI US 2005-126996 A1 20050510 (11)

PRAI US 2004-570113P 20040510 (60)

DT Utility

FS APPLICATION

LREP Natestch Pharmaceutical Company Inc., 3450 Monte Villa Parkway, Bothell, WA, 98021-8906, US

CLMN Number of Claims: 43

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 3440

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Pharmaceutical compositions and methods are described comprising at least a parathyroid hormone peptide (PTH) preferably PTH.sub.1-34 and one or more mucosal delivery-enhancing agents for enhanced nasal mucosal delivery of PTH, for treating or preventing osteoporosis or osteopenia in a mammalian subject, preferably a human.

L2 ANSWER 3 OF 12 USPATFULL on STN



AN 2005:112372 USPATFULL  
TI Full-length human cDNAs encoding potentially secreted proteins  
IN Dumas Milne Edwards, Jean-Baptiste, Paris, FRANCE  
Bougueleret, Lydie, Petit Lancy, SWITZERLAND  
Jobert, Severin, Paris, FRANCE  
PI US 2005096458 A1 20050505  
AI US 2003-643836 A1 20030819 (10)  
RLI Division of Ser. No. US 2000-731872, filed on 7 Dec 2000, ABANDONED  
PRAI US 1999-169629P 19991208 (60)  
US 2000-187470P 20000306 (60)  
DT Utility  
FS APPLICATION  
LREP SALIWANCHIK LLOYD & SALIWANCHIK, A PROFESSIONAL ASSOCIATION, PO BOX  
142950, GAINESVILLE, FL, 32614-2950, US  
CLMN Number of Claims: 16  
ECL Exemplary Claim: 1  
DRWN 5 Drawing Page(s)  
LN.CNT 28075

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention concerns GENSET polynucleotides and **polypeptides**  
. Such GENSET products may be used as reagents in forensic analyses, as  
chromosome markers, as tissue/cell/organelle-specific markers, in the  
production of expression vectors. In addition, they may be used in  
screening and diagnosis assays for abnormal GENSET expression and/or  
biological activity and for screening compounds that may be used in the  
treatment of GENSET-related disorders.

L2 ANSWER 4 OF 12 USPATFULL on STN

AN 2004:133338 USPATFULL  
TI Targets for therapeutic intervention identified in the mitochondrial  
proteome  
IN Ghosh, Soumitra S., San Diego, CA, UNITED STATES  
Fahy, Eoin D., San Diego, CA, UNITED STATES  
Zhang, Bing, Spring, TX, UNITED STATES  
Gibson, Bradford W., Berkeley, CA, UNITED STATES  
Taylor, Steven W., San Diego, CA, UNITED STATES  
Glenn, Gary M., Encinitas, CA, UNITED STATES  
Warnock, Dale E., San Diego, CA, UNITED STATES  
Gaucher, Sara P., Castro Valley, CA, UNITED STATES  
PA MitoKor Inc., San Diego, CA, UNITED STATES, 92121 (U.S. corporation)  
The Buck Institute for Age Research, Novato, CA, UNITED STATES,  
94948-0638 (U.S. corporation)  
PI US 2004101874 A1 20040527  
AI US 2003-408765 A1 20030404 (10)  
PRAI US 2002-412418P 20020920 (60)  
US 2002-389987P 20020617 (60)  
US 2002-372843P 20020412 (60)  
DT Utility  
FS APPLICATION  
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,  
SEATTLE, WA, 98104-7092  
CLMN Number of Claims: 19  
ECL Exemplary Claim: 1  
DRWN 5 Drawing Page(s)  
LN.CNT 5998

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Mitochondrial targets for drug screening assays and for therapeutic  
intervention in the treatment of diseases associated with altered  
mitochondrial function are provided. Complete amino acid sequences [SEQ  
ID NOS:1-3025] of **polypeptides** that comprise the human heart  
mitochondrial proteome are provided, using fractionated proteins derived  
from highly purified mitochondrial preparations, to identify previously  
unrecognized mitochondrial molecular components.

L2 ANSWER 5 OF 12 USPATFULL on STN

AN 2004:66006 USPATFULL  
TI DNA array sequence selection  
IN Lorenz, Matthias, Bethesda, MD, United States  
PA The United States of America as represented by the Department of Health

and Human Services, Washington, DC, United States (U.S. government)  
PI US 6706867 B1 20040316  
AI US 2000-741238 20001219 (9)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Horlick, Kenneth R.; Assistant Examiner: Wilder, Cynthia  
LREP Leydig, Voit & Mayer, Ltd.  
CLMN Number of Claims: 8  
ECL Exemplary Claim: 1  
DRWN 3 Drawing Figure(s); 29 Drawing Page(s)  
LN.CNT 23532

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides methods and compositions for the construction of custom cDNA microarrays. In particular, the methods involve the selection of relevant clusters based on knowledge and expression patterns using public database information and the identification of the best representative cDNA clones within the selected cluster. The methods facilitate the construction of custom microarrays suitable for use in any biotechnological art. In preferred embodiments, the present invention provides the the ImmunoChip.

L2 ANSWER 6 OF 12 USPATFULL on STN

AN 2003:277127 USPATFULL

TI Use of transthyretin peptide/protein fusions to increase the serum half-life of pharmacologically active peptides/proteins

IN Walker, Kenneth, Newbury Park, CA, UNITED STATES

Xiong, Fei, Thousand Oaks, CA, UNITED STATES

PI US 2003195154 A1 20031016

AI US 2003-407078 A1 20030403 (10)

RLI Continuation-in-part of Ser. No. US 2002-117109, filed on 4 Apr 2002, PENDING

DT Utility

FS APPLICATION

LREP AMGEN INCORPORATED, MAIL STOP 27-4-A, ONE AMGEN CENTER DRIVE, THOUSAND OAKS, CA, 91320-1799

CLMN Number of Claims: 37

ECL Exemplary Claim: 1

DRWN 15 Drawing Page(s)

LN.CNT 3042

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a means for increasing the serum half-life of a selected biologically active agent by utilizing transthyretin (TTR) as a fusion partner with a biologically active agent. Specifically, the present invention provides substantially homogenous preparations of TTR (or a TTR variant)-biologically active agent fusions and PEG-TTR (PEG-TTR variant)-biologically active agent fusions. As compared to the biologically active agent alone, the TTR-biologically active agent fusion and/or PEG-TTR-biologically active agent fusion has substantially increased serum half-life.

L2 ANSWER 7 OF 12 USPATFULL on STN

AN 2003:219631 USPATFULL

TI Full-length human cDNAs encoding potentially secreted proteins

IN Dumas Milne Edwards, Jean-Baptiste, Paris, FRANCE

Bougueleret, Lydie, Petit Lancy, SWITZERLAND

Jobert, Severin, Paris, FRANCE

PI US 2003152921 A1 20030814

AI US 2001-876997 A1 20010608 (9)

RLI Continuation-in-part of Ser. No. US 2000-731872, filed on 7 Dec 2000, PENDING

PRAI US 1999-169629P 19991208 (60)

US 2000-187470P 20000306 (60)

DT Utility

FS APPLICATION

LREP Frank C. Eisenschenk, Ph.D., SALIWANCHIK, LLOYD & SALIWANCHIK, 2421 N.W. 41 STREET, SUITE A-1, GAINESVILLE, FL, 32606-6669

CLMN Number of Claims: 22

ECL Exemplary Claim: 1

DRWN 5 Drawing Page(s)

LN.CNT 27600

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention concerns GENSET polynucleotides and **polypeptides**. Such GENSET products may be used as reagents in forensic analyses, as chromosome markers, as tissue/cell/organelle-specific markers, in the production of expression vectors. In addition, they may be used in screening and diagnosis assays for abnormal GENSET expression and/or biological activity and for screening compounds that may be used in the treatment of GENSET-related disorders.

L2 ANSWER 8 OF 12 USPATFULL on STN

AN 2002:191539 USPATFULL

TI Full-length human cDNAs encoding potentially secreted proteins

IN Milne Edwards, Jean-Baptiste Dumas, Paris, FRANCE

Bougueleret, Lydie, Petit Lancy, SWITZERLAND

Jobert, Severin, Paris, FRANCE

PI US 2002102604 A1 20020801

AI US 2000-731872 A1 20001207 (9)

PRAI US 1999-169629P 19991208 (60)

US 2000-187470P 20000306 (60)

DT Utility

FS APPLICATION

LREP John Lucas, Ph.D., J.D., Genset Corporation, 10665 Srrento Valley Road, San Diego, CA, 92121-1609

CLMN Number of Claims: 29

ECL Exemplary Claim: 1

DRWN 5 Drawing Page(s)

LN.CNT 28061

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention concerns GENSET polynucleotides and **polypeptides**. Such GENSET products may be used as reagents in forensic analyses, as chromosome markers, as tissue/cell/organelle-specific markers, in the production of expression vectors. In addition, they may be used in screening and diagnosis assays for abnormal GENSET expression and/or biological activity and for screening compounds that may be used in the treatment of GENSET-related disorders.

L2 ANSWER 9 OF 12 USPATFULL on STN

AN 1998:135215 USPATFULL

TI Eucaryotic NAD cyclases

IN Strumwasser, Felix, 275 Sippewissett Rd., Falmouth, MA, United States 02540

Hellmich, Mark R., 52 F. R. Lilly, Woods Hole, MA, United States 02543

Glick, David L., 7 Priscilla St., E. Falmouth, MA, United States 02536

PI US 5831074 19981103

AI US 1994-332111 19941031 (8)

RLI Continuation of Ser. No. US 1993-20485, filed on 22 Feb 1993, now patented, Pat. No. US 5393667 which is a continuation-in-part of Ser. No. US 1989-404733, filed on 8 Sep 1989, now abandoned which is a continuation-in-part of Ser. No. US 1988-266145, filed on 2 Nov 1988, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Wilson, James O.

LREP Lyon & Lyon LLP

CLMN Number of Claims: 1

ECL Exemplary Claim: 1

DRWN 5 Drawing Figure(s); 4 Drawing Page(s)

LN.CNT 786

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Eucaryotic NAD cyclases able to cause production of cyclic adenosine diphosphate ribose from nicotinamide adenine dinucleotide.

L2 ANSWER 10 OF 12 USPATFULL on STN

AN 95:18337 USPATFULL

TI Eucaryotic NAD cyclases

IN Strumwasser, Felix, 275 Sippewissett Rd., Falmouth, MA, United States 02540

Hellmich, Mark R., 52 F. R. Lilly, Woods Hole, MA, United States 02543  
PI US 5393667 19950228  
AI US 1993-20485 19930222 (8)  
RLI Division of Ser. No. US 1990-629101, filed on 17 Dec 1990, now patented,  
Pat. No. US 5202426 which is a continuation-in-part of Ser. No. US  
1989-404733, filed on 8 Sep 1989, now abandoned which is a  
continuation-in-part of Ser. No. US 1988-266145, filed on 2 Nov 1988,  
now abandoned  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Furman, Keith C.  
LREP Lyon & Lyon  
CLMN Number of Claims: 16  
ECL Exemplary Claim: 1  
DRWN 5 Drawing Figure(s); 5 Drawing Page(s)  
LN.CNT 839  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Eucaryotic NAD cyclases able to cause production of cyclic adenosine  
diphosphate ribose from nicotinamide adenine dinucleotide.

L2 ANSWER 11 OF 12 USPATFULL on STN  
AN 93:29303 USPATFULL  
TI Eucaryotic NAD cyclases  
IN Strumwasser, Felix, Falmouth, MA, United States  
Hellmich, Mark R., Woods Hole, MA, United States  
Glick, David L., Falmouth, MA, United States  
PA Marine Biological Laboratory, Woods Hole, MA, United States (U.S.  
corporation)  
PI US 5202426 19930413  
AI US 1990-629101 19901217 (7)  
RLI Continuation-in-part of Ser. No. US 1989-404733, filed on 8 Sep 1989,  
now abandoned which is a continuation-in-part of Ser. No. US  
1988-266145, filed on 2 Nov 1988, now abandoned  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Wax, Robert A.; Assistant Examiner: Furman, Keith C.  
LREP Lyon & Lyon  
CLMN Number of Claims: 1  
ECL Exemplary Claim: 1  
DRWN 5 Drawing Figure(s); 5 Drawing Page(s)  
LN.CNT 754  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Eucaryotic NAD cyclases able to cause production of cyclic adenosine  
diphosphate ribose from nicotinamide adenine dinucleotide.

L2 ANSWER 12 OF 12 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on  
STN DUPLICATE 1  
AN 1994:20151 BIOSIS  
DN PREV199497033151  
TI A 60 kDa polypeptide of skeletal-muscle  
sarcoplasmic reticulum is a calmodulin-dependent protein kinase that  
associates with and phosphorylates several membrane proteins.  
AU Leddy, John J.; Murphy, Brian J.; Qu-Yi; Doucet, Jean-Pierre; Pratt,  
Christine; Tuana, Balwant S.  
CS Dep. Pharmacol., Univ. Ottawa, Ottawa, ON K1H 8M5, Canada  
SO Biochemical Journal, (1993) Vol. 295, No. 3, pp. 849-856.  
ISSN: 0264-6021.  
DT Article  
LA English  
ED Entered STN: 25 Jan 1994  
Last Updated on STN: 26 Jan 1994  
AB Activation of a calmodulin (CaM)-dependent protein kinase associated with  
rabbit skeletal-muscle sarcoplasmic reticulum (SR) results in the  
phosphorylation of polypeptides of 450, 360, 165, 105, 89, 60,  
34 and 20 kDa. Radioligand-binding studies indicated that a  
membrane-bound 60 kDa polypeptide contained  
both CaM- and ATP-binding domains. Under renaturing conditions on  
nitrocellulose blots, the 60 kDa polypeptide  
of the membrane exhibited CaM-dependent autophosphorylation activity,

suggesting that it was the CaM-dependent protein kinase of SR. Ca-2+/CaM-independent autophosphorylation of **polypeptides** of 62 and 45 kDa was found to occur in the light SR, whereas the Ca-2+/CaM-dependent autophosphorylation activity was enriched in the heavy SR. Both these kinase activities were absent from transverse tubules, although these membranes were enriched in CaM-binding **polypeptides** of 160, 100 and 80 kDa. In the absence of Ca-2+, CaM bound to a 33 kDa **polypeptide** of the membrane. The purified ryanodine receptor was not phosphorylated by the purified CaM kinase, although it was a substrate for protein kinase C. Affinity-purified antibodies to brain CaM kinase II cross-reacted with the **60 kDa polypeptide** in Western blots and immunoprecipitated the **60 kDa polypeptide**, along with the 360, 105, 89, 34 and 20 kDa phosphoproteins, from Nonidet-P-40-solubilized SR membranes. Antibodies raised against the **60 kDa kinase polypeptide** did not cross-react with the other phosphoproteins, suggesting that these **polypeptides** were distinct and unrelated. Subcellular distribution of the **60 kDa kinase** indicated the specific association of the **polypeptide** with the junctional-face membrane of SR. The CaM-dependent incorporation of 32P into various membrane proteins was inhibited by the CaM kinase II fragment (290-309), with an IC-50 value of 2 nM for the inhibition of incorporation into the **60 kDa kinase polypeptide**. Recent studies (Wang and Best (1992) Nature (London) 359, 739-741) have shown that a CaM kinase activity intrinsic to the membrane can inactivate the Ca-2+-release channel of skeletal muscle SR. Since our results demonstrate that the **60 kDa polypeptide** of SR is a CaM-dependent protein kinase, we suggest that this kinase, through its associations, may be responsible for gating the Ca-2+-release channel.

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=> s (calcium release) and polypeptide? and ((65 kda)or(65 kilodalton?)or(65,000 dalton?))
L3      9 (CALCIUM RELEASE) AND POLYPEPTIDE? AND ((65 KDA) OR(65 KILODALTON?) OR(65,000 DALTON?))
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=> dup rem l3
PROCESSING COMPLETED FOR L3
L4      9 DUP REM L3 (0 DUPLICATES REMOVED)
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=> d bib ab 1-
YOU HAVE REQUESTED DATA FROM 9 ANSWERS - CONTINUE? Y/(N):y
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```
L4      ANSWER 1 OF 9  USPATFULL on STN
AN      2005:330188  USPATFULL
TI      Mycoplasma polypeptides
IN      Hsu, Walter H., 2725 Northridge Circle, Ames, IA, UNITED STATES  50014
        Young, Theresa F., Carlsbad, CA, UNITED STATES
        Ross, Richard F., Ames, IA, UNITED STATES
        Zhou, En-Min, Ames, IA, UNITED STATES
PA      Iowa State University Research Foundation, Inc., Ames, IA, UNITED STATES, 50011-2131 (U.S. corporation)
PI      US 2005287163      A1      20051229
AI      US 2003-509926      A1      20030404 (10)
        WO 2003-US10305      20030404
        20050729  PCT 371 date
PRAI    US 2003-370344P      20020405 (60)
DT      Utility
FS      APPLICATION
LREP    FISH & RICHARDSON P.C., PO BOX 1022, MINNEAPOLIS, MN, 55440-1022, US
CLMN    Number of Claims: 33
ECL     Exemplary Claim: 1
DRWN    15 Drawing Page(s)
LN.CNT  1268
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB      The invention provides methods and materials related to mycoplasma. For example, the invention provides mycoplasma polypeptides having the ability to increase calcium release from cells (e.g., porcine ciliated tracheal cells) as well as antibodies that bind
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to such mycoplasma **polypeptides**. In addition, the invention provides methods for identifying inhibitors of mycoplasma-induced **calcium release** from porcine ciliated tracheal cells.

L4 ANSWER 2 OF 9 USPATFULL on STN  
AN 2005:183963 USPATFULL  
TI Growth factor homolog zveg3  
IN Gao, Zeren, Redmond, WA, UNITED STATES  
Hart, Charles E., Woodinville, WA, UNITED STATES  
Piddington, Christopher S., Thousand Oaks, CA, UNITED STATES  
Sheppard, Paul O., Granite Falls, WA, UNITED STATES  
Shoemaker, Kimberly E., Bellevue, WA, UNITED STATES  
Gilbertson, Debra G., Seattle, WA, UNITED STATES  
West, James W., Seattle, WA, UNITED STATES  
PA ZymoGenetics, Inc. (U.S. corporation)  
PI US 2005159358 A1 20050721  
AI US 2004-21088 A1 20041222 (11)  
RLI Continuation of Ser. No. US 2000-541752, filed on 31 Mar 2000, GRANTED,  
Pat. No. US 6887982 Continuation-in-part of Ser. No. US 1999-457066,  
filed on 7 Dec 1999, GRANTED, Pat. No. US 6432673  
PRAI US 1998-111173P 19981207 (60)  
US 1999-142576P 19990706 (60)  
US 1999-161653P 19991021 (60)  
US 1999-165255P 19991112 (60)  
DT Utility  
FS APPLICATION  
LREP Gary E. Parker, Patent Department, ZymoGenetics, Inc., 1201 Eastlake  
Avenue East, Seattle, WA, 98102, US  
CLMN Number of Claims: 20  
ECL Exemplary Claim: 1  
DRWN 12 Drawing Page(s)  
LN.CNT 5035  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB **Polypeptide** growth factors, methods of making them,  
polynucleotides encoding them, antibodies to them, and methods of using  
them are disclosed. The **polypeptides** comprise an amino acid  
segment that is at least 90% identical to residues 46-163 of SEQ ID NO:2  
or residues 235-345 of SEQ ID NO:2. Multimers of the  
**polypeptides** are also disclosed. The **polypeptides**,  
multimeric proteins, and polynucleotides can be used in the study and  
regulation of cell and tissue development, as components of cell culture  
media, and as diagnostic agents.

L4 ANSWER 3 OF 9 USPATFULL on STN  
AN 2005:107326 USPATFULL  
TI Antibodies reactive to the c-terminal portion of growth factor homolog  
zveg3  
IN Gao, Zeren, Redmond, WA, UNITED STATES  
Hart, Charles E., Woodinville, WA, UNITED STATES  
Piddington, Christopher S., Thousand Oaks, CA, UNITED STATES  
Sheppard, Paul O., Granite Falls, WA, UNITED STATES  
Shoemaker, Kimberly E., Bellevue, WA, UNITED STATES  
PA ZymoGenetics, Inc., Seattle, WA, UNITED STATES (U.S. corporation)  
PI US 6887982 B1 20050503  
AI US 2000-541752 20000331 (9)  
RLI Continuation-in-part of Ser. No. US 1999-457066, filed on 7 Dec 1999,  
PENDING  
PRAI US 1999-165255P 19991112 (60)  
US 1999-161653P 19991021 (60)  
US 1999-142576P 19990706 (60)  
US 1998-111173P 19981207 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Spector, Lorraine  
LREP Parker, Gary E.  
CLMN Number of Claims: 4  
ECL Exemplary Claim: 1  
DRWN 6 Drawing Figure(s); 12 Drawing Page(s)  
LN.CNT 5009

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Polypeptide growth factors, methods of making them, polynucleotides encoding them, antibodies to them, and methods of using them are disclosed. The polypeptides comprise an amino acid segment that is at least 90% identical to residues 46-163 of SEQ ID NO:2 or residues 235-345 of SEQ ID NO:2. Multimers of the polypeptides are also disclosed. The polypeptides, multimeric proteins, and polynucleotides can be used in the study and regulation of cell and tissue development, as components of cell culture media, and as diagnostic agents.

L4 ANSWER 4 OF 9 USPATFULL on STN

AN 2004:66006 USPATFULL

TI DNA array sequence selection

IN Lorenz, Matthias, Bethesda, MD, United States

PA The United States of America as represented by the Department of Health and Human Services, Washington, DC, United States (U.S. government)

PI US 6706867 B1 20040316

AI US 2000-741238 20001219 (9)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Horlick, Kenneth R.; Assistant Examiner: Wilder, Cynthia

LREP Leydig, Voit & Mayer, Ltd.

CLMN Number of Claims: 8

ECL Exemplary Claim: 1

DRWN 3 Drawing Figure(s); 29 Drawing Page(s)

LN.CNT 23532

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides methods and compositions for the construction of custom cDNA microarrays. In particular, the methods involve the selection of relevant clusters based on knowledge and expression patterns using public database information and the identification of the best representative cDNA clones within the selected cluster. The methods facilitate the construction of custom microarrays suitable for use in any biotechnological art. In preferred embodiments, the present invention provides the the ImmunoChip.

L4 ANSWER 5 OF 9 USPATFULL on STN

AN 2003:220740 USPATFULL

TI Methods and compositions for diagnosing and treating rheumatoid arthritis

IN Pittman, Debra D., Windham, NH, UNITED STATES

Feldman, Jeffrey L., Arlington, MA, UNITED STATES

Shields, Kathleen M., Harvard, MA, UNITED STATES

Trepicchio, William L., Andover, MA, UNITED STATES

PI US 2003154032 A1 20030814

AI US 2001-23451 A1 20011217 (10)

PRAI US 2000-255861P 20001215 (60)

DT Utility

FS APPLICATION

LREP Patent Group, FOLEY, HOAG & ELIOT LLP, One Post Office Square, Boxton, MA, 02109

CLMN Number of Claims: 40

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 25385

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides methods and compositions for diagnostic assays for detecting R.A. and therapeutic methods and compositions for treating R.A. The invention also provides methods for designing, identifying, and optimizing therapeutics for R.A. Diagnostic compositions of the invention include compositions comprising detection agents for detecting one or more genes that have been shown to be up- or down-regulated in cells of R.A. relative to normal counterpart cells. Exemplary detection agents include nucleic acid probes, which can be in solution or attached to a solid surface, e.g., in the form of a microarray. The invention also provides computer-readable media comprising values of levels of expression of one or more genes that are up- or down-regulated in R.A.

L4 ANSWER 6 OF 9 USPATFULL on STN  
AN 2003:59938 USPATFULL  
TI Growth factor homolog zvegfg3  
IN Gao, Zeren, Redmond, WA, United States  
Hart, Charles E., Woodinville, WA, United States  
Piddington, Christopher S., Thousand Oaks, CA, United States  
Sheppard, Paul O., Granite Falls, WA, United States  
Shoemaker, Kimberly E., Bellevue, WA, United States  
Gilbertson, Debra G., Seattle, WA, United States  
West, James W., Seattle, WA, United States  
PA ZymoGenetics, Inc., Seattle, WA, United States (U.S. corporation)  
PI US 6528050 B1 20030304  
AI US 2000-706968 20001106 (9)  
RLI Continuation of Ser. No. US 2000-541752, filed on 31 Mar 2000  
Continuation-in-part of Ser. No. US 1999-457066, filed on 7 Dec 1999  
PRAI US 1999-165255P 19991112 (60)  
US 1999-161653P 19991021 (60)  
US 1999-142576P 19990706 (60)  
US 1998-111173P 19981207 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Spector, Lorraine; Assistant Examiner: Jiang, Dong  
LREP Parker, Gary E.  
CLMN Number of Claims: 15  
ECL Exemplary Claim: 1,8  
DRWN 12 Drawing Figure(s); 12 Drawing Page(s)  
LN.CNT 4336  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB **Polypeptide** growth factors, methods of making them, polynucleotides encoding them, antibodies to them, and methods of using them are disclosed. The **polypeptides** comprise an amino acid segment that is at least 90% identical to residues 46-163 of SEQ ID NO:2 or residues 235-345 of SEQ ID NO:2. Multimers of the **polypeptides** are also disclosed. The **polypeptides**, multimeric proteins, and polynucleotides can be used in the study and regulation of cell and tissue development, as components of cell culture media, and as diagnostic agents.

L4 ANSWER 7 OF 9 USPATFULL on STN  
AN 2002:314716 USPATFULL  
TI Growth factor homolog zvegfg3  
IN Gao, Zeren, Redmond, WA, UNITED STATES  
Hart, Charles E., Woodinville, WA, UNITED STATES  
Piddington, Christopher S., Thousand Oaks, CA, UNITED STATES  
Sheppard, Paul O., Granite Falls, WA, UNITED STATES  
Shoemaker, Kimberly E., Bellevue, WA, UNITED STATES  
Gilbertson, Debra G., Seattle, WA, UNITED STATES  
West, James W., Seattle, WA, UNITED STATES  
PA ZymoGenetics, Inc. (U.S. corporation)  
PI US 2002177193 A1 20021128  
US 6814965 B2 20041109  
AI US 2002-139583 A1 20020502 (10)  
RLI Division of Ser. No. US 1999-457066, filed on 7 Dec 1999, PENDING  
PRAI US 1998-111173P 19981207 (60)  
US 1999-142576P 19990706 (60)  
US 1999-161653P 19991021 (60)  
US 1999-165255P 19991112 (60)  
DT Utility  
FS APPLICATION  
LREP Gary E. Parker, Patent Department, ZymoGenetics, Inc., 1201 Eastlake Avenue East, Seattle, WA, 98102  
CLMN Number of Claims: 53  
ECL Exemplary Claim: 1  
DRWN 12 Drawing Page(s)  
LN.CNT 5072  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB **Polypeptide** growth factors, methods of making them, polynucleotides encoding them, antibodies to them, and methods of using



them are disclosed. The **polypeptides** comprise an amino acid segment that is at least 90% identical to residues 46-163 of SEQ ID NO: 2 or residues 235-345 of SEQ ID NO: 2. Multimers of the **polypeptides** are also disclosed. The **polypeptides**, multimeric proteins, and polynucleotides can be used in the study and regulation of cell and tissue development, as components of cell culture media, and as diagnostic agents.

L4 ANSWER 8 OF 9 USPATFULL on STN  
AN 2002:201870 USPATFULL  
TI Growth factor homolog ZVEGF3  
IN Gao, Zeren, Redmond, WA, United States  
Hart, Charles E., Woodinville, WA, United States  
Piddington, Christopher S., Thousand Oaks, CA, United States  
Sheppard, Paul O., Granite Falls, WA, United States  
Shoemaker, Kimberly E., Bellevue, WA, United States  
Gilbertson, Debra G., Seattle, WA, United States  
West, James W., Seattle, WA, United States  
PA ZymoGenetics, Inc., Seattle, WA, United States (U.S. corporation)  
PI US 6432673 B1 20020813  
AI US 1999-457066 19991207 (9)  
PRAI US 1998-111173P 19981207 (60)  
US 1999-142576P 19990706 (60)  
US 1999-161653P 19991021 (60)  
US 1999-165255P 19991112 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Spector, Lorraine; Assistant Examiner: Jiang, Dong  
LREP Parker, Gary E.  
CLMN Number of Claims: 26  
ECL Exemplary Claim: 1,8  
DRWN 12 Drawing Figure(s); 12 Drawing Page(s)  
LN.CNT 4888

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB **Polypeptide** growth factors, methods of making them, polynucleotides encoding them, antibodies to them, and methods of using them are disclosed. The **polypeptides** comprise an amino acid segment that is at least 90% identical to residues 46-163 of SEQ ID NO:2 or residues 235-345 of SEQ ID NO:2. Multimers of the **polypeptides** are also disclosed. The **polypeptides**, multimeric proteins, and polynucleotides can be used in the study and regulation of cell and tissue development, as components of cell culture media, and as diagnostic agents.

L4 ANSWER 9 OF 9 USPATFULL on STN  
AN 2002:109015 USPATFULL  
TI Method of use for murine leukaemia inhibitory factor-binding protein (mLBP)  
IN Nicola, Nicos Anthony, Mount Albert, AUSTRALIA  
Layton, Meredith, Tecoma, AUSTRALIA  
Metcalf, Donald, Balwyn, AUSTRALIA  
Simpson, Richard J, Richmond, AUSTRALIA  
PA Amrad Corporation Limited, Victoria, AUSTRALIA (non-U.S. corporation)  
PI US 6387875 B1 20020514  
WO 9401464 19940120  
AI US 1994-331650 19941110 (8)  
WO 1993-AU325 19930701  
19941110 PCT 371 date  
PRAI AU 1992-3265 19920701  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Kunz, Gary L.; Assistant Examiner: Gucker, Stephen  
LREP Scully, Scott, Murphy & Presser  
CLMN Number of Claims: 2  
ECL Exemplary Claim: 2  
DRWN 25 Drawing Figure(s); 15 Drawing Page(s)  
LN.CNT 1362

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a isolated leukaemia inhibitory factor

(LIF)-binding protein (LBP) in soluble form and obtainable from a first mammalian species, said LBP capable of inhibiting the ability of LIF from a second mammalian species to induce differentiation of M1 myeloid leukaemic cells in vitro to a greater extent when compared to its ability to inhibit LIF from said first mammalian species.

=> s (calcium release) and polypeptide? and ((90 kda)or(90 kilodalton?)or(90,000 dalton?))  
L5 11 (CALCIUM RELEASE) AND POLYPEPTIDE? AND ((90 KDA) OR(90 KILODALTON?) OR(90,000 DALTON?))

=> dup rem l5  
PROCESSING COMPLETED FOR L5  
L6 11 DUP REM L5 (0 DUPLICATES REMOVED)

=> d bib ab 1-  
YOU HAVE REQUESTED DATA FROM 11 ANSWERS - CONTINUE? Y/(N):y

L6 ANSWER 1 OF 11 USPATFULL on STN  
AN 2006:33900 USPATFULL  
TI Enhanced oral and transcompartmental delivery of therapeutic or diagnostic agents  
IN Ramanathan, Srinivasan, Mountain View, CA, UNITED STATES  
Stein, Stanley, East Brunswick, NJ, UNITED STATES  
Leibowitz, Michael, Manalapan, NJ, UNITED STATES  
Sinko, Patrick J., Lebanon, NJ, UNITED STATES  
Minko, Tamara, Edison, NJ, UNITED STATES  
Williams, Gregory C., Warren, NJ, UNITED STATES  
Zhang, Goubao, San Diego, CA, UNITED STATES  
Zhang, Xiaoping, Piscataway, NJ, UNITED STATES  
Pooyan, Shahrair, Monnt Kisco, NY, UNITED STATES  
Park, Seong Hee, Piscataway, NJ, UNITED STATES  
Qiu, Bo, East Brunswick, NJ, UNITED STATES  
Paranjpe, Pankaj, Piscataway, NJ, UNITED STATES  
PI US 2006029667 A1 20060209  
AI US 2005-170652 A1 20050629 (11)  
RLI Continuation of Ser. No. US 2002-72657, filed on 8 Feb 2002, ABANDONED  
PRAI US 2001-267396P 20010208 (60)  
DT Utility  
FS APPLICATION  
LREP DAVIDSON, DAVIDSON & KAPPEL, LLC, 485 SEVENTH AVENUE, 14TH FLOOR, NEW YORK, NY, 10018, US  
CLMN Number of Claims: 27  
ECL Exemplary Claim: 1  
DRWN 25 Drawing Page(s)  
LN.CNT 3090  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The invention is directed to pharmaceutical compositions and methods for delivery of a therapeutic or diagnostic agent from one bodily compartment to one or more other bodily compartment by administering one of the following conjugates: a polymer having multiple functional groups at least one of which is covalently bound to a therapeutic or diagnostic agent, and at least one cell uptake promoter covalently bound to the therapeutic or diagnostic agent; or a polymer and at least one cell uptake promoter bound thereto; the polymer further comprising multiple functional groups at least one of which is covalently bound a therapeutic or diagnostic agent.

L6 ANSWER 2 OF 11 USPATFULL on STN  
AN 2006:21442 USPATFULL  
TI Nucleic acids encoding proteins involved in sensory transduction  
IN Zuker, Charles S., San Diego, CA, UNITED STATES  
Adler, Jon E., Pacific Beach, CA, UNITED STATES  
Lindemeier, Juergen, Werl, GERMANY, FEDERAL REPUBLIC OF  
Cowan, David, Pacific Beach, CA, UNITED STATES  
PA The Regents of the University of California, Oakland, CA, UNITED STATES, 94607-5200 (U.S. corporation)  
PI US 2006019275 A1 20060126  
AI US 2005-130821 A1 20050516 (11)

RLI Continuation of Ser. No. US 1999-361630, filed on 27 Jul 1999, PENDING  
PRAI US 1998-94464P 19980728 (60)  
DT Utility  
FS APPLICATION  
LREP TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH  
FLOOR, SAN FRANCISCO, CA, 94111-3834, US  
CLMN Number of Claims: 93  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 3418

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides isolated nucleic acid and amino acid sequences of  
sensory cell specific **polypeptides**, antibodies to such  
**polypeptides**, methods of detecting such nucleic acids and  
**polypeptides**, and methods of screening for modulators of sensory  
cell specific **polypeptides**.

L6 ANSWER 3 OF 11 USPATFULL on STN  
AN 2005:330188 USPATFULL  
TI Mycoplasma **polypeptides**  
IN Hsu, Walter H., 2725 Northridge Circle, Ames, IA, UNITED STATES 50014  
Young, Theresa F., Carlsbad, CA, UNITED STATES  
Ross, Richard F., Ames, IA, UNITED STATES  
Zhou, En-Min, Ames, IA, UNITED STATES  
PA Iowa State University Research Foundation, Inc., Ames, IA, UNITED  
STATES, 50011-2131 (U.S. corporation)  
PI US 2005287163 A1 20051229  
AI US 2003-509926 A1 20030404 (10)  
WO 2003-US10305 20030404  
20050729 PCT 371 date

PRAI US 2003-370344P 20020405 (60)  
DT Utility  
FS APPLICATION  
LREP FISH & RICHARDSON P.C., PO BOX 1022, MINNEAPOLIS, MN, 55440-1022, US  
CLMN Number of Claims: 33  
ECL Exemplary Claim: 1  
DRWN 15 Drawing Page(s)  
LN.CNT 1268

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides methods and materials related to mycoplasma. For  
example, the invention provides mycoplasma **polypeptides** having  
the ability to increase **calcium release** from cells  
(e.g., porcine ciliated tracheal cells) as well as antibodies that bind  
to such mycoplasma **polypeptides**. In addition, the invention  
provides methods for identifying inhibitors of mycoplasma-induced  
**calcium release** from porcine ciliated tracheal cells.

L6 ANSWER 4 OF 11 USPATFULL on STN  
AN 2005:286918 USPATFULL  
TI Novel genes, compositions, and methods for modulating the unfolded  
protein response  
IN Kaufman, Randal J., Ann Arbor, MI, UNITED STATES  
Lee, Kyungho, Seoul, KOREA, REPUBLIC OF  
Mori, Kazutoshi, Kyoto, JAPAN  
PA UNIVERSITY OF MICHIGAN, Ann Arbor, MI, UNITED STATES (U.S. corporation)  
PI US 2005250182 A1 20051110  
AI US 2004-971994 A1 20041021 (10)  
RLI Continuation of Ser. No. WO 2003-US12640, filed on 22 Apr 2003, PENDING  
PRAI US 2002-375098P 20020422 (60)  
US 2002-374880P 20020423 (60)  
DT Utility  
FS APPLICATION  
LREP FOLEY HOAG, LLP, PATENT GROUP, WORLD TRADE CENTER WEST, 155 SEAPORT  
BLVD, BOSTON, MA, 02110, US  
CLMN Number of Claims: 52  
ECL Exemplary Claim: 1  
DRWN 28 Drawing Page(s)  
LN.CNT 3947

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to methods and compositions for modulating the unfolded protein response. The method further relates to methods and compositions for the treatment and diagnosis of protein conformational diseases or disorders, including, but not limited to,  $\alpha$ 1-antitrypsin deficiency, cystic fibrosis, and autoimmune diseases and disorders. The invention further provides methods for modulating the unfolded protein response by modulating XBP1 mRNA splicing.

L6 ANSWER 5 OF 11 USPATFULL on STN

AN 2004:133338 USPATFULL

TI Targets for therapeutic intervention identified in the mitochondrial proteome

IN Ghosh, Soumitra S., San Diego, CA, UNITED STATES

Fahy, Eoin D., San Diego, CA, UNITED STATES

Zhang, Bing, Spring, TX, UNITED STATES

Gibson, Bradford W., Berkeley, CA, UNITED STATES

Taylor, Steven W., San Diego, CA, UNITED STATES

Glenn, Gary M., Encinitas, CA, UNITED STATES

Warnock, Dale E., San Diego, CA, UNITED STATES

Gaucher, Sara P., Castro Valley, CA, UNITED STATES

PA MitoKor Inc., San Diego, CA, UNITED STATES, 92121 (U.S. corporation)

The Buck Institute for Age Research, Novato, CA, UNITED STATES,

94948-0638 (U.S. corporation)

PI US 2004101874 A1 20040527

AI US 2003-408765 A1 20030404 (10)

PRAI US 2002-412418P 20020920 (60)

US 2002-389987P 20020617 (60)

US 2002-372843P 20020412 (60)

DT Utility

FS APPLICATION

LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092

CLMN Number of Claims: 19

ECL Exemplary Claim: 1

DRWN 5 Drawing Page(s)

LN.CNT 5998

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Mitochondrial targets for drug screening assays and for therapeutic intervention in the treatment of diseases associated with altered mitochondrial function are provided. Complete amino acid sequences [SEQ ID NOS:1-3025] of **polypeptides** that comprise the human heart mitochondrial proteome are provided, using fractionated proteins derived from highly purified mitochondrial preparations, to identify previously unrecognized mitochondrial molecular components.

L6 ANSWER 6 OF 11 USPATFULL on STN

AN 2004:66006 USPATFULL

TI DNA array sequence selection

IN Lorenz, Matthias, Bethesda, MD, United States

PA The United States of America as represented by the Department of Health and Human Services, Washington, DC, United States (U.S. government)

PI US 6706867 B1 20040316

AI US 2000-741238 20001219 (9)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Horlick, Kenneth R.; Assistant Examiner: Wilder, Cynthia

LREP Leydig, Voit & Mayer, Ltd.

CLMN Number of Claims: 8

ECL Exemplary Claim: 1

DRWN 3 Drawing Figure(s); 29 Drawing Page(s)

LN.CNT 23532

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides methods and compositions for the construction of custom cDNA microarrays. In particular, the methods involve the selection of relevant clusters based on knowledge and expression patterns using public database information and the identification of the best representative cDNA clones within the

selected cluster. The methods facilitate the construction of custom microarrays suitable for use in any biotechnological art. In preferred embodiments, the present invention provides the the ImmunoChip.

L6 ANSWER 7 OF 11 USPATFULL on STN

AN 2003:277127 USPATFULL

TI Use of transthyretin peptide/protein fusions to increase the serum half-life of pharmacologically active peptides/proteins

IN Walker, Kenneth, Newbury Park, CA, UNITED STATES

Xiong, Fei, Thousand Oaks, CA, UNITED STATES

PI US 2003195154 A1 20031016

AI US 2003-407078 A1 20030403 (10)

RLI Continuation-in-part of Ser. No. US 2002-117109, filed on 4 Apr 2002, PENDING

DT Utility

FS APPLICATION

LREP AMGEN INCORPORATED, MAIL STOP 27-4-A, ONE AMGEN CENTER DRIVE, THOUSAND OAKS, CA, 91320-1799

CLMN Number of Claims: 37

ECL Exemplary Claim: 1

DRWN 15 Drawing Page(s)

LN.CNT 3042

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a means for increasing the serum half-life of a selected biologically active agent by utilizing transthyretin (TTR) as a fusion partner with a biologically active agent. Specifically, the present invention provides substantially homogenous preparations of TTR (or a TTR variant)-biologically active agent fusions and PEG-TTR (PEG-TTR variant)-biologically active agent fusions. As compared to the biologically active agent alone, the TTR-biologically active agent fusion and/or PEG-TTR-biologically active agent fusion has substantially increased serum half-life.

L6 ANSWER 8 OF 11 USPATFULL on STN

AN 2003:133555 USPATFULL

TI Enhanced oral and transcompartmental delivery of therapeutic or diagnostic agents

IN Ramanathan, Srinivasan, Mountain View, CA, UNITED STATES

Stein, Stanley, East Brunswick, NJ, UNITED STATES

Leibowitz, Michael, Manalapan, NJ, UNITED STATES

Sinko, Patrick J., Lebanon, NJ, UNITED STATES

Minko, Tamara, Edison, NJ, UNITED STATES

Williams, Gregory C., Warren, NJ, UNITED STATES

Zhang, Goubao, San Diego, CA, UNITED STATES

Zhang, Xiaoping, Piscataway, NJ, UNITED STATES

Pooyan, Shahrair, Monnt Kisco, NY, UNITED STATES

Park, Seong Hee, Piscataway, NJ, UNITED STATES

Qiu, Bo, East Brunswick, NJ, UNITED STATES

Paranjpe, Pankaj, Piscataway, NJ, UNITED STATES

PI US 2003091640 A1 20030515

AI US 2002-72657 A1 20020208 (10)

PRAI US 2001-267396P 20010208 (60)

DT Utility

FS APPLICATION

LREP KLAUBER & JACKSON, 411 HACKENSACK AVENUE, HACKENSACK, NJ, 07601

CLMN Number of Claims: 68

ECL Exemplary Claim: 1

DRWN 25 Drawing Page(s)

LN.CNT 3252

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention is directed to pharmaceutical compositions and methods for delivery of a therapeutic or diagnostic agent from one bodily compartment to one or more other bodily compartment by administering one of the following conjugates: a polymer having multiple functional groups at least one of which is covalently bound to a therapeutic or diagnostic agent, and at least one cell uptake promoter covalently bound to the therapeutic or diagnostic agent; or a polymer and at least one cell uptake promoter bound thereto; the polymer further comprising multiple functional groups at least one of which is covalently bound a

therapeutic or diagnostic agent.

L6 ANSWER 9 OF 11 USPATFULL on STN  
AN 2003:168926 USPATFULL  
TI Calpain and DNA encoding the same  
IN Fukiage, Chiho, Katano, JAPAN  
Azuma, Mitsuyoshi, Nishinomiya, JAPAN  
PA Senju Pharmaceutical Co., Ltd., Osaka, JAPAN (non-U.S. corporation)  
PI US 6582932 B1 20030624  
WO 9945107 19990910  
AI US 2000-622880 20000824 (9)  
WO 1999-JP903 19990226  
PRAI JP 1998-49430 19980302  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: McGarry, Sean; Assistant Examiner: Epps-Ford, Janet L.  
LREP Wenderoth, Lind & Ponack, L.L.P.  
CLMN Number of Claims: 5  
ECL Exemplary Claim: 1  
DRWN 16 Drawing Figure(s); 16 Drawing Page(s)  
LN.CNT 1497

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A calpain protein which is specific for the retina in eye tissues containing a protein having an amino acid sequence represented by SEQ ID NO: 1 in Sequence Listing; a DNA represented by SEQ ID NO: 2 in Sequence Listing which encodes the above protein; a vector containing this DNA; a transformant transformed by this vector; and a process for producing the calpain protein which comprises culturing the transformant.

L6 ANSWER 10 OF 11 USPATFULL on STN  
AN 2002:301092 USPATFULL  
TI NUCLEIC ACIDS ENCODING PROTEINS INVOLVED IN SENSORY TRANSDUCTION  
IN ZUKER, CHARLES S., SAN DIEGO, CA, UNITED STATES  
ADLER, JON E., WASHINGTON, DC, UNITED STATES  
LINDEMEIER, JUERGEN, WERL, GERMANY, FEDERAL REPUBLIC OF  
COWAN, DAVID, PACIFIC BEACH, CA, UNITED STATES  
PI US 2002168635 A1 20021114  
AI US 1999-361630 A1 19990727 (9)  
PRAI US 1998-94464P 19980728 (60)  
DT Utility  
FS APPLICATION  
LREP PILLSBURY WINTHROP, LLP, P.O. BOX 10500, MCLEAN, VA, 22102  
CLMN Number of Claims: 93  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 3439

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides isolated nucleic acid and amino acid sequences of sensory cell specific **polypeptides**, antibodies to such **polypeptides**, methods of detecting such nucleic acids and **polypeptides**, and methods of screening for modulators of sensory cell specific **polypeptides**.

L6 ANSWER 11 OF 11 USPATFULL on STN  
AN 2002:109015 USPATFULL  
TI Method of use for murine leukaemia inhibitory factor-binding protein (mLBP)  
IN Nicola, Nicos Anthony, Mount Albert, AUSTRALIA  
Layton, Meredith, Tecoma, AUSTRALIA  
Metcalf, Donald, Balwyn, AUSTRALIA  
Simpson, Richard J, Richmond, AUSTRALIA  
PA Amrad Corporation Limited, Victoria, AUSTRALIA (non-U.S. corporation)  
PI US 6387875 B1 20020514  
WO 9401464 19940120  
AI US 1994-331650 19941110 (8)  
WO 1993-AU325 19930701  
19941110 PCT 371 date  
PRAI AU 1992-3265 19920701  
DT Utility

FS GRANTED  
EXNAM Primary Examiner: Kunz, Gary L.; Assistant Examiner: Gucker, Stephen  
LREP Scully, Scott, Murphy & Presser  
CLMN Number of Claims: 2  
ECL Exemplary Claim: 2  
DRWN 25 Drawing Figure(s); 15 Drawing Page(s)  
LN.CNT 1362

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a isolated leukaemia inhibitory factor (LIF)-binding protein (LBP) in soluble form and obtainable from a first mammalian species, said LBP capable of inhibiting the ability of LIF from a second mammalian species to induce differentiation of M1 myeloid leukaemic cells in vitro to a greater extent when compared to its ability to inhibit LIF from said first mammalian species.

=> s (calcium release) and polypeptide? and ((120 kda)or(120 kilodalton?)or(120,000 dalton?))  
L7 4 (CALCIUM RELEASE) AND POLYPEPTIDE? AND ((120 KDA) OR(120 KILODAL TON?) OR(120,000 DALTON?))

=> dup rem l7

PROCESSING COMPLETED FOR L7

L8 4 DUP REM L7 (0 DUPLICATES REMOVED)

=> d bib ab 1-

YOU HAVE REQUESTED DATA FROM 4 ANSWERS - CONTINUE? Y/(N):y

L8 ANSWER 1 OF 4 USPATFULL on STN

AN 2005:330188 USPATFULL

TI Mycoplasma **polypeptides**

IN Hsu, Walter H., 2725 Northridge Circle, Ames, IA, UNITED STATES 50014

Young, Theresa F., Carlsbad, CA, UNITED STATES

Ross, Richard F., Ames, IA, UNITED STATES

Zhou, En-Min, Ames, IA, UNITED STATES

PA Iowa State University Research Foundation, Inc., Ames, IA, UNITED STATES, 50011-2131 (U.S. corporation)

PI US 2005287163 A1 20051229

AI US 2003-509926 A1 20030404 (10)

WO 2003-US10305 20030404

20050729 PCT 371 date

PRAI US 2003-370344P 20020405 (60)

DT Utility

FS APPLICATION

LREP FISH & RICHARDSON P.C., PO BOX 1022, MINNEAPOLIS, MN, 55440-1022, US

CLMN Number of Claims: 33

ECL Exemplary Claim: 1

DRWN 15 Drawing Page(s)

LN.CNT 1268

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides methods and materials related to mycoplasma. For example, the invention provides mycoplasma **polypeptides** having the ability to increase **calcium release** from cells (e.g., porcine ciliated tracheal cells) as well as antibodies that bind to such mycoplasma **polypeptides**. In addition, the invention provides methods for identifying inhibitors of mycoplasma-induced **calcium release** from porcine ciliated tracheal cells.

L8 ANSWER 2 OF 4 USPATFULL on STN

AN 2005:143801 USPATFULL

TI Treatment of immunological disorders using anti-dc30 antibodies

IN Law, Che-Leung, North Shoreline, WA, UNITED STATES

Klussman, Kerry, Seattle, WA, UNITED STATES

Wahl, Alan F., Mercer Island, WA, UNITED STATES

Senter, Peter, Seattle, WA, UNITED STATES

Doronina, Svetlana, Seattle, WA, UNITED STATES

Toki, Brian, Everett, WA, UNITED STATES

PI US 2005123536 A1 20050609

AI US 2003-496628 A1 20021120 (10)

WO 2002-US37223                    20021120  
PRAI US 2003-331750P            20011120 (60)  
DT Utility  
FS APPLICATION  
LREP JONES DAY, 222 EAST 41ST ST, NEW YORK, NY, 10017, US  
CLMN Number of Claims: 210  
ECL Exemplary Claim: 1  
DRWN 23 Drawing Page(s)  
LN.CNT 5592

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to methods for the treatment of immunological disorders other than cancer, comprising administering proteins characterized by their ability to bind to CD30 and exert a cytostatic or cytotoxic effect on an activated lymphocyte. Such proteins include monoclonal antibodies AC10 and IleFi1. AC10 and HeFi-1 derivatives, and antibodies that compete with AC10 and HeFi-1 for binding to CD30. Other such proteins include multivalent anti-CD30 antibodies and anti-CD30 antibodies conjugated to cytotoxic agents. Treatment modalities with antibodies of the invention are also provided.

L8 ANSWER 3 OF 4 USPATFULL on STN

AN 2004:24356 USPATFULL  
TI Recombinant anti-CD30 antibodies and uses thereof  
IN Francisco, Joseph A., Edmonds, WA, UNITED STATES  
Risdon, Grant, Seattle, WA, UNITED STATES  
Wahl, Alan F., Mercer Island, WA, UNITED STATES  
Siegall, Clay, Edmonds, WA, UNITED STATES  
Senter, Peter D., Seattle, WA, UNITED STATES  
Doronina, Sveltana, Snohomish, WA, UNITED STATES  
Toki, Brian E., Lynnwood, WA, UNITED STATES

PI US 2004018194 A1 20040129

AI US 2003-447257 A1 20030528 (10)

RLI Continuation-in-part of Ser. No. WO 2001-US44811, filed on 28 Nov 2001, PENDING Continuation-in-part of Ser. No. US 2000-724406, filed on 28 Nov 2000, PENDING

PRAI US 2002-400403P            20020731 (60)

DT Utility

FS APPLICATION

LREP Pennie & Edmonds LLP, 1155 Avenue of the Americas, New York, NY, 10036-2711

CLMN Number of Claims: 18

ECL Exemplary Claim: 1

DRWN 15 Drawing Page(s)

LN.CNT 4545

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to methods and compositions for the treatment of Hodgkin's Disease, comprising administering proteins characterized by their ability to bind to CD30, or compete with monoclonal antibodies AC10 or HeFi-1 for binding to CD30, and exert a cytostatic or cytotoxic effect on Hodgkin's disease cells in the absence of effector cells or complement. Such proteins include derivatives of monoclonal antibodies AC10 and HeFi-1. The proteins of the invention can be human, humanized, or chimeric antibodies; further, they can be conjugated to cytotoxic agents such as chemotherapeutic drugs. The invention further relates to nucleic acids encoding the proteins of the invention. The invention yet further relates to a method for identifying an anti-CD30 antibody useful for the treatment or prevention of Hodgkin's Disease.

L8 ANSWER 4 OF 4 USPATFULL on STN

AN 97:70894 USPATFULL

TI NF-AT.sub.p, ' a T lymphocyte DNA-binding protein

IN Rao, Anjana, Cambridge, MA, United States  
Hogan, Patrick Gerald, Cambridge, MA, United States  
McCaffrey, Patricia, Newton, MA, United States  
Jain, Jugnu, Natick, MA, United States

PA President and Fellows of Harvard College, Cambridge, MA, United States (U.S. corporation)

Dana-Farber Cancer Institute, Inc., Boston, MA, United States (U.S.



corporation)  
PI US 5656452 19970812  
AI US 1993-145006 19931029 (8)  
RLI Continuation-in-part of Ser. No. US 1993-17052, filed on 11 Feb 1993,  
now abandoned which is a continuation-in-part of Ser. No. US 1993-6067,  
filed on 15 Jan 1993, now abandoned  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Patterson, Jr., Charles L.; Assistant Examiner:  
Grimes, Eric  
LREP Fish & Richardson, P.C.  
CLMN Number of Claims: 16  
ECL Exemplary Claim: 1  
DRWN 28 Drawing Figure(s); 20 Drawing Page(s)  
LN.CNT 2085  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Isolated nucleic acids encoding the NF-AT.sub.p protein, a T lymphocyte  
DNA binding protein.

=> s (calcium release) and polypeptide? and ((35 kda)or(35 kilodalton?)or(35,000 dalton?))  
L9 12 (CALCIUM RELEASE) AND POLYPEPTIDE? AND ((35 KDA) OR(35 KILODALTO  
N?) OR(35,000 DALTON?))

=> .dup rem l9  
PROCESSING COMPLETED FOR L9  
L10 12 DUP REM L9 (0 DUPLICATES REMOVED)

=> d bib ab 1-  
YOU HAVE REQUESTED DATA FROM 12 ANSWERS - CONTINUE? Y/(N):y

L10 ANSWER 1 OF 12 USPATFULL on STN  
AN 2006:21442 USPATFULL  
TI Nucleic acids encoding proteins involved in sensory transduction  
IN Zuker, Charles S., San Diego, CA, UNITED STATES  
Adler, Jon E., Pacific Beach, CA, UNITED STATES  
Lindemeier, Juergen, Werl, GERMANY, FEDERAL REPUBLIC OF  
Cowan, David, Pacific Beach, CA, UNITED STATES  
PA The Regents of the University of California, Oakland, CA, UNITED STATES,  
94607-5200 (U.S. corporation)  
PI US 2006019275 A1 20060126  
AI US 2005-130821 A1 20050516 (11)  
RLI Continuation of Ser. No. US 1999-361630, filed on 27 Jul 1999, PENDING  
PRAI US 1998-94464P 19980728 (60)  
DT Utility  
FS APPLICATION  
LREP TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH  
FLOOR, SAN FRANCISCO, CA, 94111-3834, US  
CLMN Number of Claims: 93  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 3418  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The invention provides isolated nucleic acid and amino acid sequences of  
sensory cell specific **polypeptides**, antibodies to such  
**polypeptides**, methods of detecting such nucleic acids and  
**polypeptides**, and methods of screening for modulators of sensory  
cell specific **polypeptides**.

L10 ANSWER 2 OF 12 USPATFULL on STN  
AN 2005:330188 USPATFULL  
TI Mycoplasma **polypeptides**  
IN Hsu, Walter H., 2725 Northridge Circle, Ames, IA, UNITED STATES 50014  
Young, Theresa F., Carlsbad, CA, UNITED STATES  
Ross, Richard F., Ames, IA, UNITED STATES  
Zhou, En-Min, Ames, IA, UNITED STATES  
PA Iowa State University Research Foundation, Inc., Ames, IA, UNITED  
STATES, 50011-2131 (U.S. corporation)  
PI US 2005287163 A1 20051229

AI US 2003-509926 A1 20030404 (10)  
WO 2003-US10305 20030404  
20050729 PCT 371 date

PRAI US 2003-370344P 20020405 (60)  
DT Utility  
FS APPLICATION  
LREP FISH & RICHARDSON P.C., PO BOX 1022, MINNEAPOLIS, MN, 55440-1022, US  
CLMN Number of Claims: 33  
ECL Exemplary Claim: 1  
DRWN 15 Drawing Page(s)  
LN.CNT 1268

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides methods and materials related to mycoplasma. For example, the invention provides mycoplasma **polypeptides** having the ability to increase **calcium release** from cells (e.g., porcine ciliated tracheal cells) as well as antibodies that bind to such mycoplasma **polypeptides**. In addition, the invention provides methods for identifying inhibitors of mycoplasma-induced **calcium release** from porcine ciliated tracheal cells.

L10 ANSWER 3 OF 12 USPATFULL on STN

AN 2005:286918 USPATFULL

TI Novel genes, compositions, and methods for modulating the unfolded protein response

IN Kaufman, Randal J., Ann Arbor, MI, UNITED STATES  
Lee, Kyungho, Seoul, KOREA, REPUBLIC OF  
Mori, Kazutoshi, Kyoto, JAPAN

PA UNIVERSITY OF MICHIGAN, Ann Arbor, MI, UNITED STATES (U.S. corporation)

PI US 2005250182 A1 20051110

AI US 2004-971994 A1 20041021 (10)

RLI Continuation of Ser. No. WO 2003-US12640, filed on 22 Apr 2003, PENDING

PRAI US 2002-375098P 20020422 (60)

US 2002-374880P 20020423 (60)

DT Utility

FS APPLICATION

LREP FOLEY HOAG, LLP, PATENT GROUP, WORLD TRADE CENTER WEST, 155 SEAPORT BLVD, BOSTON, MA, 02110, US

CLMN Number of Claims: 52

ECL Exemplary Claim: 1

DRWN 28 Drawing Page(s)

LN.CNT 3947

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to methods and compositions for modulating the unfolded protein response. The method further relates to methods and compositions for the treatment and diagnosis of protein conformational diseases or disorders, including, but not limited to,  $\alpha$ 1-antitrypsin deficiency, cystic fibrosis, and autoimmune diseases and disorders. The invention further provides methods for modulating the unfolded protein response by modulating XBP1 mRNA splicing.

L10 ANSWER 4 OF 12 USPATFULL on STN

AN 2004:133338 USPATFULL

TI Targets for therapeutic intervention identified in the mitochondrial proteome

IN Ghosh, Soumitra S., San Diego, CA, UNITED STATES  
Fahy, Eoin D., San Diego, CA, UNITED STATES  
Zhang, Bing, Spring, TX, UNITED STATES  
Gibson, Bradford W., Berkeley, CA, UNITED STATES  
Taylor, Steven W., San Diego, CA, UNITED STATES  
Glenn, Gary M., Encinitas, CA, UNITED STATES  
Warnock, Dale E., San Diego, CA, UNITED STATES  
Gaucher, Sara P., Castro Valley, CA, UNITED STATES

PA MitoKor Inc., San Diego, CA, UNITED STATES, 92121 (U.S. corporation)  
The Buck Institute for Age Research, Novato, CA, UNITED STATES, 94948-0638 (U.S. corporation)

PI US 2004101874 A1 20040527

AI US 2003-408765 A1 20030404 (10)

PRAI US 2002-412418P 20020920 (60)

US 2002-389987P      20020617 (60)  
 US 2002-372843P      20020412 (60)  
 DT      Utility  
 FS      APPLICATION  
 LREP      SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,  
           SEATTLE, WA, 98104-7092  
 CLMN      Number of Claims: 19  
 ECL      Exemplary Claim: 1  
 DRWN      5 Drawing Page(s)  
 LN.CNT 5998  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB      Mitochondrial targets for drug screening assays and for therapeutic  
           intervention in the treatment of diseases associated with altered  
           mitochondrial function are provided. Complete amino acid sequences [SEQ  
           ID NOS:1-3025] of **polypeptides** that comprise the human heart  
           mitochondrial proteome are provided, using fractionated proteins derived  
           from highly purified mitochondrial preparations, to identify previously  
           unrecognized mitochondrial molecular components.  
  
 L10      ANSWER 5 OF 12    USPATFULL on STN  
 AN      2004:57393    USPATFULL  
 TI      Intracellular signaling molecules  
 IN      Baughn, Mariah R, San Leandro, CA, UNITED STATES  
           Ding, Li, Creve Couer, MO, UNITED STATES  
           Elliott, Vicki S, San Jose, CA, UNITED STATES  
           Gandhi, Ameena R, San Francisco, CA, UNITED STATES  
           Gietzen, Kimberly J, San Jose, CA, UNITED STATES  
           Griffin, Jennifer A, Fremont, CA, UNITED STATES  
           Gururajan, Rajagopal, San Jose, CA, UNITED STATES  
           Hafalia, April J A, Daly City, CA, UNITED STATES  
           Kearney, Liam, San Francisco, CA, UNITED STATES  
           Khan, Farrah A, Des Plaines, IL, UNITED STATES  
           Lal, Preeti G, Santa Clara, CA, UNITED STATES  
           Lee, Ernestine A, Castro Valley, CA, UNITED STATES  
           M Lu, Dyung Aina, San Jose, CA, UNITED STATES  
           Lu, Yan, Mountain View, CA, UNITED STATES  
           Nguyen, Danniel B, San Jose, CA, UNITED STATES  
           Arvizu, Chandra S, San Jose, CA, UNITED STATES  
           Ramkumar, Jayalaxmi, Fremont, CA, UNITED STATES  
           Tang, Y Tom, San Jose, CA, UNITED STATES  
           Thangavelu, Kavitha, Sunnyvale, CA, UNITED STATES  
           Thornton, Michael B, Oakland, CA, UNITED STATES  
           Chawla, Narinder K, Union City, CA, UNITED STATES  
           Warren, Bridget A, Encinitas, CA, UNITED STATES  
           Xu, Yuming, Mountain View, CA, UNITED STATES  
           Yao, Monique G, Carmel, IN, UNITED STATES  
           Yue, Henry, Sunnyvale, CA, UNITED STATES  
  
 PI      US 2004043395      A1      20040304  
 AI      US 2003-399456      A1      20030414 (10)  
           WO 2001-US32090      20011012  
 DT      Utility  
 FS      APPLICATION  
 LREP      INCYTE CORPORATION, 3160 PORTER DRIVE, PALO ALTO, CA, 94304  
 CLMN      Number of Claims: 95  
 ECL      Exemplary Claim: 1  
 DRWN      No Drawings  
 LN.CNT 6007  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB      The invention provides human intracellular signaling molecules (INTSIG)  
           and polynucleotides which identify and encode INTSIG. The invention also  
           provides expression vectors, host cells, antibodies, agonists, and  
           antagonists. The invention also provides methods for diagnosing,  
           treating, or preventing disorders associated with aberrant expression of  
           INTSIG.  
  
 L10      ANSWER 6 OF 12    USPATFULL on STN  
 AN      2004:38693    USPATFULL  
 TI      Novel G-protein coupled receptors  
 IN      Powers, Scott, Greenlawn, NY, UNITED STATES

Yang, Jianxin, Commack, NY, UNITED STATES  
 Cutler, Gene, San Francisco, CA, UNITED STATES  
 PA Tularik Inc., South San Francisco, CA, UNITED STATES (U.S. corporation)  
 PI US 2004029232 A1 20040212  
 AI US 2003-633894 A1 20030804 (10)  
 RLI Division of Ser. No. US 2000-546986, filed on 11 Apr 2000, GRANTED, Pat.  
 No. US 6635741 Continuation-in-part of Ser. No. US 2000-524730, filed on  
 14 Mar 2000, GRANTED, Pat. No. US 6638733  
 DT Utility  
 FS APPLICATION  
 LREP TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH  
 FLOOR, SAN FRANCISCO, CA, 94111-3834  
 CLMN Number of Claims: 41  
 ECL Exemplary Claim: 1  
 DRWN 3 Drawing Page(s)  
 LN.CNT 2916  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB The invention provides isolated nucleic acid and amino acid sequences of  
 four novel G-protein coupled receptors that are amplified in breast  
 cancer cells, antibodies to such receptors, methods of detecting such  
 nucleic acids and receptors, and methods of screening for modulators of  
 G-protein coupled receptors.  
 L10 ANSWER 7 OF 12 USPATFULL on STN  
 AN 2004:13385 USPATFULL  
 TI Proteins and nucleic acids encoding same  
 IN Alsobrook, John P., II, Madison, CT, UNITED STATES  
 Anderson, David W., Branford, CT, UNITED STATES  
 Ballinger, Robert A., Newington, CT, UNITED STATES  
 Boldog, Ference L., North Haven, CT, UNITED STATES  
 Burgess, Catherine E., Wethersfield, CT, UNITED STATES  
 Casman, Stacie J., North Haven, CT, UNITED STATES  
 Ellerman, Karen, Branford, CT, UNITED STATES  
 Gangolli, Esha A., Madison, CT, UNITED STATES  
 Gerlach, Valerie, Branford, CT, UNITED STATES  
 Gilbert, Jennifer A., Madison, CT, UNITED STATES  
 Gorman, Linda, Branford, CT, UNITED STATES  
 Guo, Xiaojia (Sasha), Branford, CT, UNITED STATES  
 Gusev, Vladimir Y., Madison, CT, UNITED STATES  
 Kekuda, Ramesh, Norwalk, CT, UNITED STATES  
 Li, Li, Branford, CT, UNITED STATES  
 Liu, Xiaohong, Branford, CT, UNITED STATES  
 Malyankar, Uriel M., Branford, CT, UNITED STATES  
 Miller, Charles E., Guilford, CT, UNITED STATES  
 Millet, Isabelle, Milford, CT, UNITED STATES  
 Padigar, Muralidhara, Branford, CT, UNITED STATES  
 Patturajan, Meera, Branford, CT, UNITED STATES  
 A. Pena, Carol E., New Haven, CT, UNITED STATES  
 Peyman, John A., New Haven, CT, UNITED STATES  
 Rastelli, Luca, Guilford, CT, UNITED STATES  
 Shenoy, Suresh G., Branford, CT, UNITED STATES  
 Shimkets, Richard A., Guilford, CT, UNITED STATES  
 Smithson, Glennnda, Guilford, CT, UNITED STATES  
 Spytek, Kimberly A., New Haven, CT, UNITED STATES  
 Stone, David J., Guilford, CT, UNITED STATES  
 Taupier, Raymond J., JR., East Haven, CT, UNITED STATES  
 Tchernev, Velizar T., Branford, CT, UNITED STATES  
 Vernet, Corine A.M., Branford, CT, UNITED STATES  
 Zerhusen, Bryan D., Branford, CT, UNITED STATES  
 PI US 2004009907 A1 20040115  
 AI US 2002-85198 A1 20020225 (10)  
 PRAI US 2001-271646P 20010226 (60)  
 US 2001-276401P 20010316 (60)  
 US 2001-311981P 20010813 (60)  
 US 2001-312858P 20010816 (60)  
 US 2001-271840P 20010227 (60)  
 US 2001-277324P 20010320 (60)  
 US 2001-286096P 20010424 (60)  
 US 2001-299695P 20010620 (60)

US 2001-315614P	20010829 (60)
US 2001-272405P	20010228 (60)
US 2001-272410P	20010228 (60)
US 2001-272414P	20010228 (60)
US 2001-278660P	20010320 (60)
US 2001-280234P	20010330 (60)
US 2001-272404P	20010228 (60)
US 2001-280039P	20010330 (60)
US 2001-313280P	20010817 (60)
US 2001-322818P	20010917 (60)
US 2001-273300P	20010302 (60)
US 2001-280818P	20010402 (60)
US 2001-288353P	20010503 (60)
US 2001-294834P	20010531 (60)
US 2001-299845P	20010621 (60)
US 2001-272922P	20010302 (60)
US 2001-272787P	20010302 (60)
US 2001-285754P	20010423 (60)
US 2001-303242P	20010705 (60)
US 2001-273048P	20010302 (60)
US 2001-283443P	20010412 (60)
US 2001-291703P	20010517 (60)

DT Utility

FS APPLICATION

LREP Ivor R. Elrifi, MINTZ, LEVIN, COHN, FERRIS,, GLOVSKY and POPEO, P.C.,  
One Financial Center, Boston, MA, 02111

CLMN Number of Claims: 49

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 46330

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed herein are nucleic acid sequences that encode novel **polypeptides**. Also disclosed are **polypeptides** encoded by these nucleic acid sequences, and antibodies, which immunospecifically-bind to the **polypeptide**, as well as derivatives, variants, mutants, or fragments of the aforementioned **polypeptide**, polynucleotide, or antibody. The invention further discloses therapeutic, diagnostic and research methods for diagnosis, treatment, and prevention of disorders involving any one of these novel human nucleic acids and proteins.

L10 ANSWER 8 OF 12 USPATFULL on STN

AN 2004:66006 USPATFULL

TI DNA array sequence selection

IN Lorenz, Matthias, Bethesda, MD, United States

PA The United States of America as represented by the Department of Health and Human Services, Washington, DC, United States (U.S. government)

PI US 6706867 B1 20040316

AI US 2000-741238 20001219 (9)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Horlick, Kenneth R.; Assistant Examiner: Wilder, Cynthia

LREP Leydig, Voit & Mayer, Ltd.

CLMN Number of Claims: 8

ECL Exemplary Claim: 1

DRWN 3 Drawing Figure(s); 29 Drawing Page(s)

LN.CNT 23532

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides methods and compositions for the construction of custom cDNA microarrays. In particular, the methods involve the selection of relevant clusters based on knowledge and expression patterns using public database information and the identification of the best representative cDNA clones within the selected cluster. The methods facilitate the construction of custom microarrays suitable for use in any biotechnological art. In preferred embodiments, the present invention provides the the ImmunoChip.

L10 ANSWER 9 OF 12 USPATFULL on STN

AN 2003:220740 USPATFULL  
TI Methods and compositions for diagnosing and treating rheumatoid arthritis  
IN Pittman, Debra D., Windham, NH, UNITED STATES  
Feldman, Jeffrey L., Arlington, MA, UNITED STATES  
Shields, Kathleen M., Harvard, MA, UNITED STATES  
Trepicchio, William L., Andover, MA, UNITED STATES  
PI US 2003154032 A1 20030814  
AI US 2001-23451 A1 20011217 (10)  
PRAI US 2000-255861P 20001215 (60)  
DT Utility  
FS APPLICATION  
LREP Patent Group, FOLEY, HOAG & ELIOT LLP, One Post Office Square, Bostox, MA, 02109  
CLMN Number of Claims: 40  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 25385  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The invention provides methods and compositions for diagnostic assays for detecting R.A. and therapeutic methods and compositions for treating R.A. The invention also provides methods for designing, identifying, and optimizing therapeutics for R.A. Diagnostic compositions of the invention include compositions comprising detection agents for detecting one or more genes that have been shown to be up- or down-regulated in cells of R.A. relative to normal counterpart cells. Exemplary detection agents include nucleic acid probes, which can be in solution or attached to a solid surface, e.g., in the form of a microarray. The invention also provides computer-readable media comprising values of levels of expression of one or more genes that are up- or down-regulated in R.A.

L10 ANSWER 10 OF 12 USPATFULL on STN

AN 2002:301092 USPATFULL  
TI NUCLEIC ACIDS ENCODING PROTEINS INVOLVED IN SENSORY TRANSDUCTION  
IN ZUKER, CHARLES S., SAN DIEGO, CA, UNITED STATES  
ADLER, JON E., WASHINGTON, DC, UNITED STATES  
LINDEMEIER, JUERGEN, WERL, GERMANY, FEDERAL REPUBLIC OF  
COWAN, DAVID, PACIFIC BEACH, CA, UNITED STATES  
PI US 2002168635 A1 20021114  
AI US 1999-361630 A1 19990727 (9)  
PRAI US 1998-94464P 19980728 (60)  
DT Utility  
FS APPLICATION  
LREP PILLSBURY WINTHROP, LLP, P.O. BOX 10500, MCLEAN, VA, 22102  
CLMN Number of Claims: 93  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 3439  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides isolated nucleic acid and amino acid sequences of sensory cell specific **polypeptides**, antibodies to such **polypeptides**, methods of detecting such nucleic acids and **polypeptides**, and methods of screening for modulators of sensory cell specific **polypeptides**.

L10 ANSWER 11 OF 12 USPATFULL on STN

AN 2002:325826 USPATFULL  
TI Mammalian proteins that bind to FKBP12 in a rapamycin-dependent fashion  
IN Sabatini, David M., Baltimore, MD, United States  
Erdjument-Bromage, Hediye, New York, NY, United States  
Lui, Mary, Kew Gardens, NY, United States  
Tempst, Paul, New York, NY, United States  
Snyder, Solomon H., Baltimore, MD, United States  
PA The Johns Hopkins University, Baltimore, MD, United States (U.S. corporation)  
PI US 6492106 B1 20021210  
AI US 1994-305790 19940914 (8)  
RLI Continuation-in-part of Ser. No. US 1994-265967, filed on 27 Jun 1994  
DT Utility

FS GRANTED  
EXNAM Primary Examiner: Patterson, Jr., Charles L.; Assistant Examiner: Kerr, Kathleen  
LREP Banner & Witcoff, Ltd.  
CLMN Number of Claims: 12  
ECL Exemplary Claim: 1  
DRWN 11 Drawing Figure(s); 10 Drawing Page(s)  
LN.CNT 2121  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A protein complex containing 245 kDa and 35 kDa components, designated RAFT1 and RAFT2 (for Rapamycin And FKBP12 Target) interacts with FKBP12 in a rapamycin-dependent manner. This interaction has the pharmacological characteristics expected from the observed in vivo effects of rapamycin: it occurs at low nanomolar concentrations of rapamycin and is competed by excess FK506. Sequences (330 amino acids total) of tryptic peptides derived from the affinity purified 245 kDa RAFT1 reveals striking homologies to the predicted products of the yeast TOR genes, which were originally identified by mutations that confer rapamycin resistance in yeast. A RAFT1 cDNA was obtained and found to encode a 289 kDa protein (2550 amino acids) that is 43% and 39% identical to TOR2 and TOR1, respectively.

L10 ANSWER 12 OF 12 USPATFULL on STN

AN 2002:291067 USPATFULL  
TI Mammalian proteins that bind to FKBP12 in a rapamycin-dependent fashion  
IN Sabatini, David M., Baltimore, MD, United States  
Erdjument-Bromage, Hediye, New York, NY, United States  
Lui, Mary, Kew Gardens, NY, United States  
Tempst, Paul, New York, NY, United States  
Snyder, Solomon H., Baltimore, MD, United States  
PA The Johns Hopkins University, Baltimore, MD, United States (U.S. corporation)  
PI US 6476200 B1 20021105  
AI US 1994-265967 19940627 (8)

DT Utility  
FS GRANTED

EXNAM Primary Examiner: Prouty, Rebecca E.; Assistant Examiner: Kerr, Kathleen  
LREP Banner & Witcoff, Ltd.  
CLMN Number of Claims: 2  
ECL Exemplary Claim: 1  
DRWN 11 Drawing Figure(s); 10 Drawing Page(s)  
LN.CNT 1878  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A protein complex containing 245 kDa and 35 kDa components, designated RAFT1 and RAFT2 (for Rapamycin And FKBP12 Target) interacts with FKBP12 in a rapamycin-dependent manner. This interaction has the pharmacological characteristics expected from the observed in vivo effects of rapamycin: it occurs at low nanomolar concentrations of rapamycin and is competed by excess FK506. Sequences (330 amino acids total) of tryptic peptides derived from the affinity purified 245 kDa RAFT1 reveals striking homologies to the predicted products of the yeast TOR genes, which were originally identified by mutations that confer rapamycin resistance in yeast. A RAFT1 cDNA was obtained and found to encode a 289 kDa protein (2550 amino acids) that is 43% and 39% identical to TOR2 and TOR1, respectively.

=> s (calcium release) and polypeptide? and ((50 kda)or(50 kilodalton?)or(50,000 dalton?))  
L11 28 (CALCIUM RELEASE) AND POLYPEPTIDE? AND ((50 KDA) OR(50 KILODALTON?) OR(50,000 DALTON?))

=> dup rem l11

PROCESSING COMPLETED FOR L11

L12 28 DUP REM L11 (0 DUPLICATES REMOVED)

=> d bib ab 1-

YOU HAVE REQUESTED DATA FROM 28 ANSWERS - CONTINUE? Y/(N):y

L12 ANSWER 1 OF 28 USPATFULL on STN

AN 2006:74875 USPATFULL  
TI Leukocyte regulatory factors 1 and 2  
IN Ni, Jian, Germantown, MD, UNITED STATES  
Hu, Jing-Shan, Mountain View, CA, UNITED STATES  
Ruben, Steven M., Brookeville, MD, UNITED STATES  
Gentz, Reiner L., Gauting, GERMANY, FEDERAL REPUBLIC OF  
PA Human Genome Sciences, Inc., Rockville, MD, UNITED STATES (U.S.  
corporation)  
PI US 2006063924 A1 20060323  
AI US 2005-272833 A1 20051115 (11)  
RLI Continuation of Ser. No. US 2003-387495, filed on 14 Mar 2003, PENDING  
Continuation of Ser. No. US 2000-603735, filed on 23 Jun 2000, ABANDONED  
Continuation of Ser. No. US 1998-55998, filed on 7 Apr 1998, ABANDONED  
PRAI US 1997-43483P 19970407 (60)  
DT Utility  
FS APPLICATION  
LREP HUMAN GENOME SCIENCES INC, INTELLECTUAL PROPERTY DEPT., 14200 SHADY  
GROVE ROAD, ROCKVILLE, MD, 20850, US  
CLMN Number of Claims: 17  
ECL Exemplary Claim: 1  
DRWN 11 Drawing Page(s)  
LN.CNT 3881

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel LRF-1 and LRF-2 proteins which  
are related to the CRISP family and a protein called "Neutrophil  
Inhibitory Factor (NIF)" isolated from the canine hookworm (Ancylostoma  
caninum) that potently inhibits CD11/CD18-dependent neutrophil function.  
In particular, isolated nucleic acid molecules are provided encoding the  
human LRF-1 and LRF-2 proteins. LRF-1 and LRF-2 **polypeptides**  
are also provided, as are vectors, host cells and recombinant methods  
for producing the same. The invention further relates to screening  
methods for identifying agonists and antagonists of LRF-1 or LRF-2  
activity. Also provided are diagnostic methods for detecting immune  
system or other LRF-1- or LRF-2-related disorders and therapeutic  
methods for treating such disorders.

L12 ANSWER 2 OF 28 USPATFULL on STN

AN 2006:33900 USPATFULL  
TI Enhanced oral and transcompartmental delivery of therapeutic or  
diagnostic agents  
IN Ramanathan, Srinivasan, Mountain View, CA, UNITED STATES  
Stein, Stanley, East Brunswick, NJ, UNITED STATES  
Leibowitz, Michael, Manalapan, NJ, UNITED STATES  
Sinko, Patrick J., Lebanon, NJ, UNITED STATES  
Minko, Tamara, Edison, NJ, UNITED STATES  
Williams, Gregory C., Warren, NJ, UNITED STATES  
Zhang, Goubao, San Diego, CA, UNITED STATES  
Zhang, Xiaoping, Piscataway, NJ, UNITED STATES  
Pooyan, Shahrair, Monnt Kisco, NY, UNITED STATES  
Park, Seong Hee, Piscataway, NJ, UNITED STATES  
Qiu, Bo, East Brunswick, NJ, UNITED STATES  
Paranjpe, Pankaj, Piscataway, NJ, UNITED STATES  
PI US 2006029667 A1 20060209  
AI US 2005-170652 A1 20050629 (11)  
RLI Continuation of Ser. No. US 2002-72657, filed on 8 Feb 2002, ABANDONED  
PRAI US 2001-267396P 20010208 (60)  
DT Utility  
FS APPLICATION  
LREP DAVIDSON, DAVIDSON & KAPPEL, LLC, 485 SEVENTH AVENUE, 14TH FLOOR, NEW  
YORK, NY, 10018, US  
CLMN Number of Claims: 27  
ECL Exemplary Claim: 1  
DRWN 25 Drawing Page(s)  
LN.CNT 3090

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention is directed to pharmaceutical compositions and methods for  
delivery of a therapeutic or diagnostic agent from one bodily  
compartment to one or more other bodily compartment by administering one  
of the following conjugates: a polymer having multiple functional groups



at least one of which is covalently bound to a therapeutic or diagnostic agent, and at least one cell uptake promoter covalently bound to the therapeutic or diagnostic agent; or a polymer and at least one cell uptake promoter bound thereto; the polymer further comprising multiple functional groups at least one of which is covalently bound a therapeutic or diagnostic agent.

L12 ANSWER 3 OF 28 USPATFULL on STN

AN 2006:21514 USPATFULL

TI Biosynthetic **polypeptides** utilizing non-naturally encoded amino acids

IN Cho, Ho Sung, San Diego, CA, UNITED STATES

Daniel, Thomas O., La Jolla, CA, UNITED STATES

Hays, Anna-Maria, La Jolla, CA, UNITED STATES

Wilson, Troy E., San Marino, CA, UNITED STATES

Litzinger, David C., Poway, CA, UNITED STATES

Mariani, Roberto, San Diego, CA, UNITED STATES

Kimmel, Bruce E., San Diego, CA, UNITED STATES

Keefe, William M., San Diego, CA, UNITED STATES

PA Ambrx, Inc., San Diego, CA, UNITED STATES (U.S. corporation)

PI US 2006019347 A1 20060126

AI US 2005-187687 A1 20050721 (11)

PRAI US 2004-590035P 20040721 (60)

US 2005-659709P 20050307 (60)

DT Utility

FS APPLICATION

LREP ATTN: JOHN W. WALLEN, III, AMBRX, INC., 10410 SCIENCE CENTER DRIVE, SAN DIEGO, CA, 92121, US

CLMN Number of Claims: 26

ECL Exemplary Claim: 1

DRWN 13 Drawing Page(s)

LN.CNT 11604

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Modified biosynthetic **polypeptide** molecules, methods for manufacturing, and uses thereof are provided.

L12 ANSWER 4 OF 28 USPATFULL on STN

AN 2006:21442 USPATFULL

TI Nucleic acids encoding proteins involved in sensory transduction

IN Zuker, Charles S., San Diego, CA, UNITED STATES

Adler, Jon E., Pacific Beach, CA, UNITED STATES

Lindemeier, Juergen, Werl, GERMANY, FEDERAL REPUBLIC OF

Cowan, David, Pacific Beach, CA, UNITED STATES

PA The Regents of the University of California, Oakland, CA, UNITED STATES, 94607-5200 (U.S. corporation)

PI US 2006019275 A1 20060126

AI US 2005-130821 A1 20050516 (11)

RLI Continuation of Ser. No. US 1999-361630, filed on 27 Jul 1999, PENDING

PRAI US 1998-94464P 19980728 (60)

DT Utility

FS APPLICATION

LREP TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834, US

CLMN Number of Claims: 93

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 3418

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides isolated nucleic acid and amino acid sequences of sensory cell specific **polypeptides**, antibodies to such **polypeptides**, methods of detecting such nucleic acids and **polypeptides**, and methods of screening for modulators of sensory cell specific **polypeptides**.

L12 ANSWER 5 OF 28 USPATFULL on STN

AN 2005:330188 USPATFULL

TI Mycoplasma **polypeptides**

IN Hsu, Walter H., 2725 Northridge Circle, Ames, IA, UNITED STATES 50014

Young, Theresa F., Carlsbad, CA, UNITED STATES

Ross, Richard F., Ames, IA, UNITED STATES  
 Zhou, En-Min, Ames, IA, UNITED STATES  
 PA Iowa State University Research Foundation, Inc., Ames, IA, UNITED STATES, 50011-2131 (U.S. corporation)  
 PI US 2005287163 A1 20051229  
 AI US 2003-509926 A1 20030404 (10)  
 WO 2003-US10305 20030404  
 20050729 PCT 371 date  
 PRAI US 2003-370344P 20020405 (60)  
 DT Utility  
 FS APPLICATION  
 LREP FISH & RICHARDSON P.C., PO BOX 1022, MINNEAPOLIS, MN, 55440-1022, US  
 CLMN Number of Claims: 33  
 ECL Exemplary Claim: 1  
 DRWN 15 Drawing Page(s)  
 LN.CNT 1268  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB The invention provides methods and materials related to mycoplasma. For example, the invention provides mycoplasma **polypeptides** having the ability to increase **calcium release** from cells (e.g., porcine ciliated tracheal cells) as well as antibodies that bind to such mycoplasma **polypeptides**. In addition, the invention provides methods for identifying inhibitors of mycoplasma-induced **calcium release** from porcine ciliated tracheal cells.

L12 ANSWER 6 OF 28 USPATFULL on STN  
 AN 2005:286918 USPATFULL  
 TI Novel genes, compositions, and methods for modulating the unfolded protein response  
 IN Kaufman, Randal J., Ann Arbor, MI, UNITED STATES  
 Lee, Kyungho, Seoul, KOREA, REPUBLIC OF  
 Mori, Kazutoshi, Kyoto, JAPAN  
 PA UNIVERSITY OF MICHIGAN, Ann Arbor, MI, UNITED STATES (U.S. corporation)  
 PI US 2005250182 A1 20051110  
 AI US 2004-971994 A1 20041021 (10)  
 RLI Continuation of Ser. No. WO 2003-US12640, filed on 22 Apr 2003, PENDING  
 PRAI US 2002-375098P 20020422 (60)  
 US 2002-374880P 20020423 (60)  
 DT Utility  
 FS APPLICATION  
 LREP FOLEY HOAG, LLP, PATENT GROUP, WORLD TRADE CENTER WEST, 155 SEAPORT BLVD, BOSTON, MA, 02110, US  
 CLMN Number of Claims: 52  
 ECL Exemplary Claim: 1  
 DRWN 28 Drawing Page(s)  
 LN.CNT 3947  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB The present invention relates to methods and compositions for modulating the unfolded protein response. The method further relates to methods and compositions for the treatment and diagnosis of protein conformational diseases or disorders, including, but not limited to,  $\alpha$ 1-antitrypsin deficiency, cystic fibrosis, and autoimmune diseases and disorders. The invention further provides methods for modulating the unfolded protein response by modulating XBP1 mRNA splicing.

L12 ANSWER 7 OF 28 USPATFULL on STN  
 AN 2005:189432 USPATFULL  
 TI Nucleic acid molecule encoding homer 1B protein  
 IN Worley, Paul F., Baltimore, MD, UNITED STATES  
 Tu, Jian Cheng, Baltimore, MD, UNITED STATES  
 Xiao, Bo, Ellicott City, MD, UNITED STATES  
 Leahy, Daniel, Baltimore, MD, UNITED STATES  
 Beneken, Jutta, Baltimore, MD, UNITED STATES  
 Lanahan, Anthony A., Baltimore, MD, UNITED STATES  
 Brakeman, Paul R., Baltimore, MD, UNITED STATES  
 PI US 2005164344 A1 20050728  
 AI US 2004-8889 A1 20041210 (11)  
 RLI Division of Ser. No. US 2002-192381, filed on 9 Jul 2002, GRANTED, Pat.

No. US 6864083 Division of Ser. No. US 1999-377285, filed on 18 Aug 1999, GRANTED, Pat. No. US 6720175

PRAI US 1999-138494P 19990610 (60)  
US 1999-138493P 19990610 (60)  
US 1999-138426P 19990610 (60)  
US 1998-97334P 19980818 (60)

DT Utility  
FS APPLICATION

LREP Lisa A. Haile, J.D., Ph.D., GRAY CARY WARE & FREIDENRICH LLP, 4365 Executive Drive, Suite 1100, San Diego, CA, 92121-2133, US

CLMN Number of Claims: 6  
ECL Exemplary Claim: 1-7  
DRWN 55 Drawing Page(s)  
LN.CNT 7396

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is provided for identifying a compound that modulates a cellular response associated with Homer and mediated by a cell-surface or an intracellular receptor. A method is further provided for identifying a compound that modulates receptor activated calcium mobilization associated with Homer. A method is provided for identifying a compound that inhibits Homer protein activity based on the crystal structure coordinates of Homer protein binding domain. A method is also provided for identifying a compound that affects the formation of cell surface receptors into clusters. Also provided are nucleic acids encoding Homer proteins as well as Homer proteins, and Homer interacting proteins.

L12 ANSWER 8 OF 28 USPATFULL on STN

AN 2005:68897 USPATFULL

TI Use of a fluorescent protein for detecting interaction between a target protein and its ligand

IN Galzi, Jean-Luc, Strasbourg, FRANCE  
Alix, Philippe, Carpiquet, FRANCE

PA CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE, PARIS CEDEX, FRANCE (non-U.S. corporation)

PI US 2005059036 A1 20050317  
AI US 2004-776330 A1 20040212 (10)

RLI Continuation of Ser. No. US 2000-445205, filed on 7 Jan 2000, ABANDONED  
A 371 of International Ser. No. WO 1998-FR1136, filed on 4 Jun 1998, UNKNOWN

PRAI FR 1997-6977 19970605

DT Utility  
FS APPLICATION

LREP YOUNG & THOMPSON, 745 SOUTH 23RD STREET, 2ND FLOOR, ARLINGTON, VA, 22202

CLMN Number of Claims: 16  
ECL Exemplary Claim: 1  
DRWN 22 Drawing Page(s)  
LN.CNT 2850

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention concerns the use of a fluorescent protein selected in particular among the autofluorescent proteins for detecting the non-covalent interaction between a target protein marked by the fluorescent protein and one of its ligands marked by a marker consisting of: either a molecule capable of absorbing the light emitted by the fluorescent protein, or a fluorescent substance, said detection taking place by fluorescence energy transfer: between the fluorescent protein and said fluorescent substance, the fluorescent substance being such that it is excitable at the fluorescent protein emitting wavelength, or it emits at the fluorescent protein emitting wavelength; between the fluorescent protein and said molecule capable of absorbing the light emitted by the fluorescent protein.

L12 ANSWER 9 OF 28 USPATFULL on STN

AN 2004:18785 USPATFULL

TI Molecules for diagnostics and therapeutics

IN Hodgson, David M., Ann Arbor, MI, UNITED STATES  
Lincoln, Stephen E., Potomac, MD, UNITED STATES  
Russo, Frank D., Sunnyvale, CA, UNITED STATES  
Albany, Peter A., Berkeley, CA, UNITED STATES

Banville, Steve C., Sunnyvale, CA, UNITED STATES  
 Bratcher, Shawn R., Mountain View, CA, UNITED STATES  
 Dufour, Gerard E., Castro Valley, CA, UNITED STATES  
 Cohen, Howard J., Palo Alto, CA, UNITED STATES  
 Rosen, Bruce H., Menlo Park, CA, UNITED STATES  
 Chalup, Michael S., Livingston, TX, UNITED STATES  
 Jackson, Jennifer L., Santa Cruz, CA, UNITED STATES  
 Jones, Anissa L., San Jose, CA, UNITED STATES  
 Yu, Jimmy Y., Fremont, CA, UNITED STATES  
 Greenawalt, Lila B., San Jose, CA, UNITED STATES  
 Panzer, Scott R., Sunnyvale, CA, UNITED STATES  
 Roseberry Lincoln, Ann M., Potomac, MD, UNITED STATES  
 Wright, Rachel J., Merivale, NEW ZEALAND  
 Daniels, Susan E., Mountain View, CA, UNITED STATES  
 PA Incyte Corporation, Palo Alto, CA, UNITED STATES (U.S. corporation)  
 PI US 2004014087 A1 20040122  
 AI US 2003-378029 A1 20030228 (10)  
 RLI Continuation-in-part of Ser. No. US 2001-980285, filed on 30 Nov 2001,  
 PENDING A 371 of International Ser. No. WO 2000-US15404, filed on 31 May  
 2000, PENDING  
 PRAI US 1999-147500P 19990805 (60)  
 US 1999-147542P 19990805 (60)  
 US 1999-147541P 19990805 (60)  
 US 1999-147824P 19990805 (60)  
 US 1999-147547P 19990805 (60)  
 US 1999-147530P 19990805 (60)  
 US 1999-147536P 19990805 (60)  
 US 1999-147520P 19990805 (60)  
 US 1999-147527P 19990805 (60)  
 US 1999-147549P 19990805 (60)  
 US 1999-147377P 19990804 (60)  
 US 1999-147436P 19990804 (60)  
 US 1999-137411P 19990603 (60)  
 US 1999-137396P 19990603 (60)  
 US 1999-137417P 19990603 (60)  
 US 1999-137337P 19990603 (60)  
 US 1999-137173P 19990602 (60)  
 US 1999-137114P 19990602 (60)  
 US 1999-137259P 19990602 (60)  
 US 1999-137113P 19990602 (60)  
 US 1999-137260P 19990602 (60)  
 US 1999-137258P 19990602 (60)  
 US 1999-137109P 19990602 (60)  
 US 1999-137161P 19990601 (60)  
 DT Utility  
 FS APPLICATION  
 LREP INCYTE CORPORATION (formerly known as Incyte, Genomics, Inc.), 3160  
 PORTER DRIVE, PALO ALTO, CA, 94304  
 CLMN Number of Claims: 19  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 14819  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB The present invention provides purified human polynucleotides for  
 diagnostics and therapeutics (dithp). Also encompassed are the  
**polypeptides** (DITHP) encoded by dithp. The invention also  
 provides for the use of dithp, or complements, oligonucleotides, or  
 fragments thereof in diagnostic assays. The invention further provides  
 for vectors and host cells containing dithp for the expression of DITHP.  
 The invention additionally provides for the use of isolated and purified  
 DITHP to induce antibodies and to screen libraries of compounds and the  
 use of anti-DITHP antibodies in diagnostic assays. Also provided are  
 microarrays containing dithp and methods of use.  
 L12 ANSWER 10 OF 28 USPATFULL on STN  
 AN 2004:90636 USPATFULL  
 TI Nucleic acid molecule encoding homer 1B protein  
 IN Worley, Paul F., Baltimore, MD, United States  
 Tu, Jian Cheng, Baltimore, MD, United States

Xiao, Bo, Ellicott City, MD, United States  
Leahy, Daniel, Baltimore, MD, United States  
Beneken, Jutta, Baltimore, MD, United States  
Lanahan, Anthony A., Baltimore, MD, United States  
Brakeman, Paul R., Baltimore, MD, United States  
PA The Johns Hopkins University School of Medicine, Baltimore, MD, United States (U.S. corporation)  
PI US 6720175 B1 20040413  
AI US 1999-377285 19990818 (9)  
PRAI US 1998-97334P 19980818 (60)  
US 1999-138426P 19990610 (60)  
US 1999-138493P 19990610 (60)  
US 1999-138494P 19990610 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Kemmerer, Elizabeth; Assistant Examiner: Bunner, Bridget E.  
LREP Gray Cary Ware & Freidenrich LLP, Haile, Lisa A.  
CLMN Number of Claims: 7  
ECL Exemplary Claim: 1  
DRWN 63 Drawing Figure(s); 55 Drawing Page(s)  
LN.CNT 7496

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is provided for identifying a compound that modulates a cellular response associated with Homer and mediated by a cell-surface or an intracellular receptor. A method is further provided for identifying a compound that modulates receptor activated calcium mobilization associated with Homer. A method is provided for identifying a compound that inhibits Homer protein activity based on the crystal structure coordinates of Homer protein binding domain. A method is also provided for identifying a compound that affects the formation of cell surface receptors into clusters. Also provided are nucleic acids encoding Homer proteins as well as Homer proteins, and Homer interacting proteins.

L12 ANSWER 11 OF 28 USPATFULL on STN

AN 2004:66006 USPATFULL  
TI DNA array sequence selection  
IN Lorenz, Matthias, Bethesda, MD, United States  
PA The United States of America as represented by the Department of Health and Human Services, Washington, DC, United States (U.S. government)  
PI US 6706867 B1 20040316  
AI US 2000-741238 20001219 (9)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Horlick, Kenneth R.; Assistant Examiner: Wilder, Cynthia  
LREP Leydig, Voit & Mayer, Ltd.  
CLMN Number of Claims: 8  
ECL Exemplary Claim: 1  
DRWN 3 Drawing Figure(s); 29 Drawing Page(s)  
LN.CNT 23532

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides methods and compositions for the construction of custom cDNA microarrays. In particular, the methods involve the selection of relevant clusters based on knowledge and expression patterns using public database information and the identification of the best representative cDNA clones within the selected cluster. The methods facilitate the construction of custom microarrays suitable for use in any biotechnological art. In preferred embodiments, the present invention provides the the ImmunoChip.

L12 ANSWER 12 OF 28 USPATFULL on STN

AN 2003:330125 USPATFULL  
TI Novel human ion channel and transporter family members  
IN Curtis, Rory A. J., Framingham, MA, UNITED STATES  
Silos-Santiago, Inmaculada, Jamaica Plain, MA, UNITED STATES  
Gu, Wei, Brookline, MA, UNITED STATES  
PI US 2003232336 A1 20031218

AI US 2002-162102 A1 20020604 (10)  
RLI Continuation-in-part of Ser. No. US 2001-875321, filed on 6 Jun 2001,  
PENDING Continuation-in-part of Ser. No. WO 2001-US18340, filed on 6 Jun  
2001, PENDING  
PRAI WO 2001-US18340 20010606  
WO 2001-US18398 20010605  
WO 2001-US18247 20010605  
WO 2001-US25474 20010815  
WO 2001-US26096 20010821  
WO 2002-US9728 20020328  
US 2001-290288P 20010511 (60)  
US 2001-279281P 20010328 (60)  
US 2000-226770P 20000821 (60)  
US 2000-227068P 20000822 (60)  
US 2000-209845P 20000606 (60)  
DT Utility  
FS APPLICATION  
LREP Intellectual Property Group, MILLENNIUM PHARMACEUTICALS, INC., 75 Sidney  
Street, Cambridge, MA, 02139  
CLMN Number of Claims: 19  
ECL Exemplary Claim: 1  
DRWN 40 Drawing Page(s)  
LN.CNT 38135

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides isolated nucleic acids molecules, designated  
52906, 33408, 12189, 21784, 56201, 32620, 44589, 84226, and 8105 nucleic  
acid molecules, which encode novel human calcium channel family members,  
human sodium ion channel family members, human potassium channel family  
members, human sodium-sugar symporter family members, human ABC  
transporter family members, human cation family members, and human sugar  
transporter family members. The invention also provides antisense  
nucleic acid molecules, recombinant expression vectors containing 52906,  
33408, 12189, 21784, 56201, 32620, 44589, 84226, or 8105 nucleic acid  
molecules, host cells into which the expression vectors have been  
introduced, and nonhuman transgenic animals in which a 52906, 33408,  
12189, 21784, 56201, 32620, 44589, 84226, or 8105 gene has been  
introduced or disrupted. The invention still further provides isolated  
52906, 33408, 12189, 21784, 56201, 32620, 44589, 84226, or 8105  
proteins, fusion proteins, antigenic peptides and anti-52906, 33408,  
12189, 21784, 56201, 32620, 44589, 84226, or 8105 antibodies. Diagnostic  
methods utilizing compositions of the invention are also provided.

L12 ANSWER 13 OF 28 USPATFULL on STN

AN 2003:277127 USPATFULL

TI Use of transthyretin peptide/protein fusions to increase the serum  
half-life of pharmacologically active peptides/proteins

IN Walker, Kenneth, Newbury Park, CA, UNITED STATES

Xiong, Fei, Thousand Oaks, CA, UNITED STATES

PI US 2003195154 A1 20031016

AI US 2003-407078 A1 20030403 (10)

RLI Continuation-in-part of Ser. No. US 2002-117109, filed on 4 Apr 2002,  
PENDING

DT Utility

FS APPLICATION

LREP AMGEN INCORPORATED, MAIL STOP 27-4-A, ONE AMGEN CENTER DRIVE, THOUSAND  
OAKS, CA, 91320-1799

CLMN Number of Claims: 37

ECL Exemplary Claim: 1

DRWN 15 Drawing Page(s)

LN.CNT 3042

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a means for increasing the serum  
half-life of a selected biologically active agent by utilizing  
transthyretin (TTR) as a fusion partner with a biologically active  
agent. Specifically, the present invention provides substantially  
homogenous preparations of TTR (or a TTR variant)-biologically active  
agent fusions and PEG-TTR (PEG-TTR variant)-biologically active agent  
fusions. As compared to the biologically active agent alone, the  
TTR-biologically active agent fusion and/or PEG-TTR-biologically active

agent fusion has substantially increased serum half-life.

L12 ANSWER 14 OF 28 USPATFULL on STN

AN 2003:244398 USPATFULL

TI Nucleic acid molecule encoding homer 1b protein

IN Worley, Paul F., Baltimore, MD, UNITED STATES

Tu, Jian Cheng, Towson, MD, UNITED STATES

Xiao, Bo, Ellicott City, MD, UNITED STATES

Leahy, Daniel, Baltimore, MD, UNITED STATES

Beneken, Jutta, Baltimore, MD, UNITED STATES

Lanahan, Anthony A., Baltimore, MD, UNITED STATES

Brakeman, Paul R., Baltimore, MD, UNITED STATES

PA The Johns Hopkins University School of Medicine (U.S. corporation)

PI US 2003170807 A1 20030911

US 6864083 B2 20050308

AI US 2002-192381 A1 20020709 (10)

RLI Division of Ser. No. US 1999-377285, filed on 18 Aug 1999, ABANDONED

PRAI US 1998-97334P 19980818 (60)

US 1999-138426P 19990610 (60)

US 1999-138493P 19990610 (60)

US 1999-138494P 19990610 (60)

DT Utility

FS APPLICATION

LREP Lisa A. Haile, Ph.D., Gray Cary Ware & Freidenrich LLP, Suite 1100, 4365 Executive Drive, San Diego, CA, 92121-2133

CLMN Number of Claims: 9

ECL Exemplary Claim: 1

DRWN 55 Drawing Page(s)

LN.CNT 7687

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is provided for identifying a compound that modulates a cellular response associate with Homer and mediated by a cell-surface or an intracellular receptor. A method is further provided for identifying a compound that modulates receptor activated calcium mobilization associated with Homer. A method is provided for identifying a compound that inhibits Homer protein activity based on the crystal structure coordinates of Homer protein binding domain. A method is also provided for identifying a compound that affects the formation of cell surface receptors into clusters. Also provided are nucleic acids encoding Homer proteins as well as Homer proteins, and Homer interacting proteins.

L12 ANSWER 15 OF 28 USPATFULL on STN

AN 2003:232755 USPATFULL

TI Leukocyte regulatory factors 1 and 2

IN Ni, Jian, Germantown, MD, UNITED STATES

Hu, Jing-Shan, Mountain View, CA, UNITED STATES

Ruben, Steven M., Brookeville, MD, UNITED STATES

Gentz, Reiner L., Belo Horizonte-Mg, BRAZIL

PA Human Genome Sciences, Inc., Rockville, MD, UNITED STATES, 20850 (U.S. corporation)

PI US 2003162956 A1 20030828

AI US 2003-387495 A1 20030314 (10)

RLI Continuation of Ser. No. US 2000-603735, filed on 23 Jun 2000, PENDING

Continuation of Ser. No. US 1998-55998, filed on 7 Apr 1998, ABANDONED

PRAI US 1997-43483P 19970407 (60)

DT Utility

FS APPLICATION

LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850

CLMN Number of Claims: 40

ECL Exemplary Claim: 1

DRWN 11 Drawing Page(s)

LN.CNT 3942

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel LRF-1 and LRF-2 proteins which are related to the CRISP family and a protein called "Neutrophil Inhibitory Factor (NIF)" isolated from the canine hookworm (Ancylostoma caninum) that potently inhibits CD11/CD18-dependent neutrophil function. In particular, isolated nucleic acid molecules are provided encoding the human LRF-1 and LRF-2 proteins. LRF-1 and LRF-2 **polypeptides**

are also provided, as are vectors, host cells and recombinant methods for producing the same. The invention further relates to screening methods for identifying agonists and antagonists of LRF-1 or LRF-2 activity. Also provided are diagnostic methods for detecting immune system or other LRF-1 or LRF-2-related disorders and therapeutic methods for treating such disorders.

L12 ANSWER 16 OF 28 USPATFULL on STN

AN 2003:187835 USPATFULL

TI Methods of using 5433, a human calcium channel family member

IN Silos-Santiago, Inmaculada, Jamaica Plain, MA, UNITED STATES

PA Millennium Pharmaceuticals, Inc. (U.S. corporation)

PI US 2003129625 A1 20030710

AI US 2002-245121 A1 20020917 (10)

PRAI US 2001-322983P 20010917 (60)

DT Utility

FS APPLICATION

LREP Steven A. Bossone, Millennium Pharmaceuticals, inc., 75 Sidney Street, Cambridge, MA, 02139

CLMN Number of Claims: 9

ECL Exemplary Claim: 1

DRWN 7 Drawing Page(s)

LN.CNT 4991

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides isolated nucleic acids molecules, designated 5433 nucleic acid molecules, which encode calcium channel family members. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 5433 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 5433 gene has been introduced or disrupted. The invention still further provides isolated 5433 proteins, fusion proteins, antigenic peptides and anti-5433 antibodies. Diagnostic methods utilizing compositions of the invention are also provided.

L12 ANSWER 17 OF 28 USPATFULL on STN

AN 2003:133555 USPATFULL

TI Enhanced oral and transcompartmental delivery of therapeutic or diagnostic agents

IN Ramanathan, Srinivasan, Mountain View, CA, UNITED STATES

Stein, Stanley, East Brunswick, NJ, UNITED STATES

Leibowitz, Michael, Manalapan, NJ, UNITED STATES

Sinko, Patrick J., Lebanon, NJ, UNITED STATES

Minko, Tamara, Edison, NJ, UNITED STATES

Williams, Gregory C., Warren, NJ, UNITED STATES

Zhang, Goubao, San Diego, CA, UNITED STATES

Zhang, Xiaoping, Piscataway, NJ, UNITED STATES

Pooyan, Shahrair, Monnt Kisco, NY, UNITED STATES

Park, Seong Hee, Piscataway, NJ, UNITED STATES

Qiu, Bo, East Brunswick, NJ, UNITED STATES

Paranjpe, Pankaj, Piscataway, NJ, UNITED STATES

PI US 2003091640 A1 20030515

AI US 2002-72657 A1 20020208 (10)

PRAI US 2001-267396P 20010208 (60)

DT Utility

FS APPLICATION

LREP KLAUBER & JACKSON, 411 HACKENSACK AVENUE, HACKENSACK, NJ, 07601

CLMN Number of Claims: 68

ECL Exemplary Claim: 1

DRWN 25 Drawing Page(s)

LN.CNT 3252

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention is directed to pharmaceutical compositions and methods for delivery of a therapeutic or diagnostic agent from one bodily compartment to one or more other bodily compartment by administering one of the following conjugates: a polymer having multiple functional groups at least one of which is covalently bound to a therapeutic or diagnostic agent, and at least one cell uptake promoter covalently bound to the therapeutic or diagnostic agent; or a polymer and at least one cell uptake promoter bound thereto; the polymer further comprising multiple



functional groups at least one of which is covalently bound a therapeutic or diagnostic agent.

L12 ANSWER 18 OF 28 USPATFULL on STN

AN 2002:330264 USPATFULL

TI Inflammation-related gene

IN Jarai, Gabor, Horsham, UNITED KINGDOM

Cooper, Paul Roy, Birmingham, UNITED KINGDOM

Yousefi, Shida, Bern, SWITZERLAND

PI US 2002187947 A1 20021212

AI US 2001-798710 A1 20010302 (9)

DT Utility

FS APPLICATION

LREP THOMAS HOXIE, NOVARTIS CORPORATION, PATENT AND TRADEMARK DEPT, 564

MORRIS AVENUE, SUMMIT, NJ, 079011027

CLMN Number of Claims: 20

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1185

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The use of (A) a **polypeptide** comprising the amino acid sequence of SEQ ID NO:2, or a functionally equivalent variant of that amino acid sequence, or (B) a polynucleotide comprising a nucleotide sequence encoding the **polypeptide** (A), or (C) an antibody which is immunoreactive with the **polypeptide** (A), or (D) an antisense oligonucleotide comprising a nucleotide sequence complementary to that of polynucleotide (B), or (E) a polynucleotide probe comprising at least 15 consecutive nucleotides of (B), in a pharmaceutical for the diagnosis or treatment of a neutrophil-associated inflammatory disease.

L12 ANSWER 19 OF 28 USPATFULL on STN

AN 2002:301092 USPATFULL

TI NUCLEIC ACIDS ENCODING PROTEINS INVOLVED IN SENSORY TRANSDUCTION

IN ZUKER, CHARLES S., SAN DIEGO, CA, UNITED STATES

ADLER, JON E., WASHINGTON, DC, UNITED STATES

LINDEMEIER, JUERGEN, WERL, GERMANY, FEDERAL REPUBLIC OF

COWAN, DAVID, PACIFIC BEACH, CA, UNITED STATES

PI US 2002168635 A1 20021114

AI US 1999-361630 A1 19990727 (9)

PRAI US 1998-94464P 19980728 (60)

DT Utility

FS APPLICATION

LREP PILLSBURY WINTHROP, LLP, P.O. BOX 10500, MCLEAN, VA, 22102

CLMN Number of Claims: 93

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 3439

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides isolated nucleic acid and amino acid sequences of sensory cell specific **polypeptides**, antibodies to such **polypeptides**, methods of detecting such nucleic acids and **polypeptides**, and methods of screening for modulators of sensory cell specific **polypeptides**.

L12 ANSWER 20 OF 28 USPATFULL on STN

AN 2002:172488 USPATFULL

TI Myosin IXa and cyclic nucleotide gated channel-15 (CNGC-15) polynucleotides, **polypeptides**, compositions, methods, and uses thereof

IN Adams, Arwen E., Oakland, CA, UNITED STATES

Chin, Choi Ying, Castro Valley, CA, UNITED STATES

Duhl, David, Oakland, CA, UNITED STATES

Gorman, Susan W., Santa Monica, CA, UNITED STATES

Leng, Song, Castro Valley, CA, UNITED STATES

Sheffield, Val, Iowa City, IA, UNITED STATES

Welch, Juliet, Kensington, CA, UNITED STATES

PA Chiron Corporation, Emeryville, CA, UNITED STATES, 94608-2916 (U.S. corporation)

PI US 2002091248 A1 20020711

AI US 2001-851682 A1 20010508 (9)  
RLI Division of Ser. No. US 1998-172422, filed on 14 Oct 1998, PATENTED  
PRAI US 1997-62858P 19971015 (60)  
US 1997-62241P 19971017 (60)  
US 1997-68953P 19971230 (60)  
DT Utility  
FS APPLICATION  
LREP Chiron Corporation, Intellectual Property R338, P.O. Box 8097,  
Emeryville, CA, 94662-8097  
CLMN Number of Claims: 31  
ECL Exemplary Claim: 1  
DRWN 6 Drawing Page(s)  
LN.CNT 2433  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention discloses the amino acid and nucleic acid sequences of a new CNGC and Myosin that map to the region of the human chromosome associated with Bardet-Biedl Syndrome. Cyclic nucleotide gated channels (CNGCs) comprise a family of multimeric protein ion channels that open in response to the binding of a cyclic nucleotide to an intracellular domain. The two new proteins, CNGC-15 and Myosin IXa, are useful in the study, diagnosis and treatment of Bardet-Biedl Syndrome and Usher Syndrome. Other indications that can be treated by CNGC-15 and/or Myosin IXa **polypeptides**, or agonists or antagonists include hearing loss, retinis pigmentosa, obesity, hypogonadism, sterility, polydactyly, brachydactyly, syndactyly, mental retardation, renal abnormalities, hypertension, diabetes and cardiovascular abnormalities.

Compositions and methods for expressing cyclic nucleotide gated channel-15 (CNGC-15) and Myosin IXa are provided. The compositions comprise CNGC-15 and Myosin IXa **polypeptides** and derivatives thereof, nucleotide sequences, expression cassettes, transformed cells and antibodies to these **polypeptides**. Methods for the expression and detection of CNGC-15 and Myosin IXa nucleotides and **polypeptides** and compositions for the treatment of these conditions are provided.

L12 ANSWER 21 OF 28 USPATFULL on STN  
AN 2002:157589 USPATFULL  
TI Inhibition of mitochondrial calcium/sodium antiporter  
IN Anderson, Christen M., Encinitas, CA, UNITED STATES  
Davis, Robert E., San Diego, CA, UNITED STATES  
Pei, Yazhong, San Diego, CA, UNITED STATES  
Ghosh, Soumitra S., San Diego, CA, UNITED STATES  
PA MitoKor, San Diego, CA (U.S. corporation)  
PI US 2002082193 A1 20020627  
AI US 2001-960612 A1 20010920 (9)  
PRAI US 2000-233925P 20000920 (60)  
US 2000-256001P 20001215 (60)  
DT Utility  
FS APPLICATION  
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,  
SEATTLE, WA, 98104-7092  
CLMN Number of Claims: 40  
ECL Exemplary Claim: 1  
DRWN 8 Drawing Page(s)  
LN.CNT 1991  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides compositions and methods for altering insulin secretion using an agent that inhibits calcium efflux via the mitochondrial calcium/sodium antiporter (MCA). Methods of treatment are thereby provided, and are particularly useful for treatment of subjects having, or suspected of being at risk for having, diabetes mellitus. Compositions and methods related to the identification of gene sequences encoding the mitochondrial calcium/sodium antiporter, expression of such sequences and screening assays using expressed MCA products are also provided.

L12 ANSWER 22 OF 28 USPATFULL on STN

AN 2002:157058 USPATFULL  
TI 21784, a novel human calcium channel family member and uses thereof  
IN Curtis, Rory A.J., Southborough, MA, UNITED STATES  
PI US 2002081657 A1 20020627  
AI US 2001-875423 A1 20010605 (9)  
PRAI US 2000-209257P 20000605 (60)  
DT Utility  
FS APPLICATION  
LREP LOUIS MYERS, FISH & RICHARDSON P.C., 225 Franklin Street, Boston, MA,  
02110-2804  
CLMN Number of Claims: 31  
ECL Exemplary Claim: 1  
DRWN 4 Drawing Page(s)  
LN.CNT 5663

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides isolated nucleic acids molecules, designated 21784 nucleic acid molecules, which encode novel calcium channel members. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 21784 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 21784 gene has been introduced or disrupted. The invention still further provides isolated 21784 proteins, fusion proteins, antigenic peptides and anti-21784 antibodies. Diagnostic methods utilizing compositions of the invention are also provided.

L12 ANSWER 23 OF 28 USPATFULL on STN

AN 2002:325826 USPATFULL  
TI Mammalian proteins that bind to FKBP12 in a rapamycin-dependent fashion  
IN Sabatini, David M., Baltimore, MD, United States  
Erdjument-Bromage, Hediye, New York, NY, United States  
Lui, Mary, Kew Gardens, NY, United States  
Tempst, Paul, New York, NY, United States  
Snyder, Solomon H., Baltimore, MD, United States  
PA The Johns Hopkins University, Baltimore, MD, United States (U.S. corporation)  
PI US 6492106 B1 20021210  
AI US 1994-305790 19940914 (8)  
RLI Continuation-in-part of Ser. No. US 1994-265967, filed on 27 Jun 1994  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Patterson, Jr., Charles L.; Assistant Examiner: Kerr, Kathleen  
LREP Banner & Witcoff, Ltd.  
CLMN Number of Claims: 12  
ECL Exemplary Claim: 1  
DRWN 11 Drawing Figure(s); 10 Drawing Page(s)  
LN.CNT 2121

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A protein complex containing 245 kDa and 35 kDa components, designated RAFT1 and RAFT2 (for Rapamycin And FKBP12 Target) interacts with FKBP12 in a rapamycin-dependent manner. This interaction has the pharmacological characteristics expected from the observed in vivo effects of rapamycin: it occurs at low nanomolar concentrations of rapamycin and is competed by excess FK506. Sequences (330 amino acids total) of tryptic peptides derived from the affinity purified 245 kDa RAFT1 reveals striking homologies to the predicted products of the yeast TOR genes, which were originally identified by mutations that confer rapamycin resistance in yeast. A RAFT1 cDNA was obtained and found to encode a 289 kDa protein (2550 amino acids) that is 43% and 39% identical to TOR2 and TOR1, respectively.

L12 ANSWER 24 OF 28 USPATFULL on STN

AN 2002:291067 USPATFULL  
TI Mammalian proteins that bind to FKBP12 in a rapamycin-dependent fashion  
IN Sabatini, David M., Baltimore, MD, United States  
Erdjument-Bromage, Hediye, New York, NY, United States  
Lui, Mary, Kew Gardens, NY, United States  
Tempst, Paul, New York, NY, United States

Snyder, Solomon H., Baltimore, MD, United States  
PA The Johns Hopkins University, Baltimore, MD, United States (U.S. corporation)  
PI US 6476200 B1 20021105  
AI US 1994-265967 19940627 (8)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Prouty, Rebecca E.; Assistant Examiner: Kerr, Kathleen  
LREP Banner & Witcoff, Ltd.  
CLMN Number of Claims: 2  
ECL Exemplary Claim: 1  
DRWN 11 Drawing Figure(s); 10 Drawing Page(s)  
LN.CNT 1878

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A protein complex containing 245 kDa and 35 kDa components, designated RAFT1 and RAFT2 (for Rapamycin And FKBP12 Target) interacts with FKBP12 in a rapamycin-dependent manner. This interaction has the pharmacological characteristics expected from the observed in vivo effects of rapamycin: it occurs at low nanomolar concentrations of rapamycin and is competed by excess FK506. Sequences (330 amino acids total) of tryptic peptides derived from the affinity purified 245 kDa RAFT1 reveals striking homologies to the predicted products of the yeast TOR genes, which were originally identified by mutations that confer rapamycin resistance in yeast. A RAFT1 cDNA was obtained and found to encode a 289 kDa protein (2550 amino acids) that is 43% and 39% identical to TOR2 and TOR1, respectively.

L12 ANSWER 25 OF 28 USPATFULL on STN

AN 2002:224760 USPATFULL  
TI Methods for assessing the role of calcineurin immunosuppression and neurotoxicity  
IN Zhang, Wei, Stanford, CA, United States  
Seidman, Jonathan G., Milton, MA, United States  
Kagyali, Usamah S., Somerville, MA, United States  
Potter, Huntington, Boston, MA, United States  
PA President and Fellows of Harvard College, Cambridge, MA, United States (U.S. corporation)  
PI US 6444870 B1 20020903  
AI US 1998-212868 19981216 (9)  
RLI Continuation of Ser. No. US 1995-433162, filed on 3 May 1995, now abandoned  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Priebe, Scott D.; Assistant Examiner: Paras, JR., Peter  
LREP Hamilton, Brook, Smith & Reynolds, P.C.  
CLMN Number of Claims: 5  
ECL Exemplary Claim: 1  
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)  
LN.CNT 3549

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a method of identifying drugs or agents which have immuno-suppressive effects through or as a result of their effect on calcineurin, including drugs which affect the calcineurin A $\alpha$  (CNA $\alpha$ ) subunit or the calcineurin A $\beta$  (CNA $\beta$ ) subunit. In addition, the present invention relates to a method of identifying drugs which reduce (partially or totally) phosphorylation of the microtubule-associated protein tau, in the nervous system of a mammal; a method of identifying drugs which reduce (partially or totally) paired helical filament formation in the nervous system of a mammal; and a method of identifying drugs which reduce (partially or totally) formation of paired helical filaments, amyloid deposits or both. The present invention also relates to transgenic non-human mammals, such as rodents and particularly mice, which lack a functional calcineurin gene and, thus, have disrupted calcineurin expression.

L12 ANSWER 26 OF 28 USPATFULL on STN

AN 2002:109015 USPATFULL  
TI Method of use for murine leukaemia inhibitory factor-binding protein

(mLBP)

IN Nicola, Nicos Anthony, Mount Albert, AUSTRALIA  
Layton, Meredith, Tecoma, AUSTRALIA  
Metcalf, Donald, Balwyn, AUSTRALIA  
Simpson, Richard J, Richmond, AUSTRALIA

PA Amrad Corporation Limited, Victoria, AUSTRALIA (non-U.S. corporation)

PI US 6387875 B1 20020514  
WO 9401464 19940120

AI US 1994-331650 19941110 (8)  
WO 1993-AU325 19930701  
19941110 PCT 371 date

PRAI AU 1992-3265 19920701

DT Utility

FS GRANTED

EXNAM Primary Examiner: Kunz, Gary L.; Assistant Examiner: Gucker, Stephen

LREP Scully, Scott, Murphy & Presser

CLMN Number of Claims: 2

ECL Exemplary Claim: 2

DRWN 25 Drawing Figure(s); 15 Drawing Page(s)

LN.CNT 1362

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a isolated leukaemia inhibitory factor (LIF)-binding protein (LBP) in soluble form and obtainable from a first mammalian species, said LBP capable of inhibiting the ability of LIF from a second mammalian species to induce differentiation of M1 myeloid leukaemic cells in vitro to a greater extent when compared to its ability to inhibit LIF from said first mammalian species.

L12 ANSWER 27 OF 28 USPATFULL on STN

AN 2001:173729 USPATFULL

TI Myosin IXa and cyclic nucleotide gated channel-15 (CNGC-15) polynucleotides, **polypeptides**, compositions, methods, and uses thereof

IN Adams, Arwen E., Oakland, CA, United States  
Chiu, Choi Ying, Castro Valley, CA, United States  
Duhl, David, Oakland, CA, United States  
Gorman, Susan W., Santa Monica, CA, United States  
Leng, Song, Castro Valley, CA, United States  
Sheffield, Val, Iowa City, IA, United States  
Welch, Juliet, Kensington, CA, United States

PA Chiron Corporation, Emeryville, CA, United States (U.S. corporation)

PI US 6300485 B1 20011009

AI US 1998-172422 19981014 (9)

PRAI US 1997-62858P 19971015 (60)  
US 1997-62241P 19971017 (60)  
US 1997-68953P 19971230 (60)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Brusca, John S.; Assistant Examiner: Kim, Young

LREP Potter, Jane E. R., Morley, Kimberlin L., Blackburn, Robert P.

CLMN Number of Claims: 9

ECL Exemplary Claim: 1

DRWN 7 Drawing Figure(s); 7 Drawing Page(s)

LN.CNT 1955

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention discloses the amino acid and nucleic acid sequences of a new CNGC and Myosin that map to the region of the human chromosome associated with Bardet-Biedl Syndrome. Cyclic nucleotide gated channels (CNGCs) comprise a family of multimeric protein ion channels that open in response to the binding of a cyclic nucleotide to an intracellular domain. The two new proteins, CNGC-15 and Myosin IXa, are useful in the study, diagnosis and treatment of Bardet-Biedl Syndrome and Usher Syndrome. Other indications that can be treated by CNGC-15 and/or Myosin IXa **polypeptides**, or agonists or antagonists include hearing loss, retinis pigmentosa, obesity, hypogonadism, sterility, polydactyly, brachydactyly, syndactyly, mental retardation, renal abnormalities, hypertension, diabetes and cardiovascular abnormalities.

Compositions and methods for expressing cyclic nucleotide gated channel-15 (CNGC-15) and Myosin IXa are provided. The compositions comprise CNGC-15 and Myosin IXa **polypeptides** and derivatives thereof, nucleotide sequences, expression cassettes, transformed cells and antibodies to these **polypeptides**. Methods for the expression and detection of CNGC-15 and Myosin IXa nucleotides and **polypeptides** and compositions for the treatment of these conditions are provided.

L12 ANSWER 28 OF 28 USPATFULL on STN  
AN 97:70894 USPATFULL  
TI NF-AT.sub.p, ' a T lymphocyte DNA-binding protein  
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RLI Continuation-in-part of Ser. No. US 1993-17052, filed on 11 Feb 1993,  
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DT Utility  
FS Granted  
EXNAM Primary Examiner: Patterson, Jr., Charles L.; Assistant Examiner:  
Grimes, Eric  
LREP Fish & Richardson, P.C.  
CLMN Number of Claims: 16  
ECL Exemplary Claim: 1  
DRWN 28 Drawing Figure(s); 20 Drawing Page(s)  
LN.CNT 2085  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Isolated nucleic acids encoding the NF-AT.sub.p protein, a T lymphocyte  
DNA binding protein.